

How to Use Knitter's Tool Chest

Creating and Re-creating Knitting Patterns Based on Your Swatch

By Nancy C. Docken

Stop trying to match someone else's gauge!

The best ways to find what you are looking for in this User's Manual are:

- a. Check the Table of Contents beginning on the next page and use the scroll bar on the right side of this window to scroll down to the correct page. (The current page number will be displayed in a small box near the upper right corner of the screen as the scroll bar moves.)
- b. Use "CTRL-f" to open the "Find" window and enter a key word on which to search the book. (See "Computer Tips"/"Keyboard shortcuts that come in handy" on page 45 for more details.)

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Introduction

Why I built Knitter's Tool Chest

This program came about because my 14-year old grandson, Galen, admired a man's vest (waistcoat) pattern in an older British machine knitting magazine. That was what he wanted me to knit for him.

There would be challenges.

1. I had no idea where to find the yarn they used.
2. I had some yarn he wanted me to use, but it was a different thickness.
3. The pattern was written in centimeters and I think in inches.
 - a. Which size in their instructions would best fit his body?
 - b. How could I take the yarn I had, and the gauge I got when my finished swatch draped properly to make pattern pieces the right size?

As I worked through the calculations to translate centimeters to inches, I devised a method of turning schematics into small, manageable rectangles. I knew how to knit a rectangle and how to calculate the number of stitches and rows required to make it the right size from a finished swatch. When Galen's vest was done, I could take a swatch made with any yarn in stockinet, tuck, lace, or Fair Isle and use it with any schematic I had to make a project the size and shape I needed.

As I prepared to ask some fellow knitters to take a look at what I'd done, several of them made presentations of processes they had worked out to make calculating the amount of yarn required to knit their garment, building a schematic from a pattern that didn't show one, and organizing patterns so you could find the one you wanted to make, and using The Magic Formula to help with shaping. Some of these processes required pages of calculations, but I could let my program do them automatically if the user had entered the data required, and in most cases it was data they would already have while preparing to knit a garment.

Piece by piece, this project demanded that I build tools to make my knitting more accurate and more fun. And, I knew other knitters had many of these same frustrations. It needed to be shared.

What it does

The final test given to the team of knitters who tested this software was the pattern and schematic for a bibbed baby cardigan sized for a 1 year old. The knitters were instructed to select any yarn AND stitch pattern they wished. They were to make a good swatch, wash and block it. Enter the pattern, yarn, recipient measurements (standard measurements for a 12 month old from the Yarn Council.)

Knitters in the USA got a schematic with the measurements in centimeters, while our tester in Greece received a schematic measured in inches. They used the tools in Knitter's Tool Chest to change the UofM (units of measurement) to their own preference, used the magic formulae to calculate the round collar on the baby bib, the sleeve shaping, and the button placement.



In Greece, the tester reported that, for the first time ever, she had knit a garment that was the size it was supposed to be. She did this using a boucle yarn. Here's her sweater:

In the USA, there were three sweaters completed. One was knit from lace

weight yarn in a tight tuck stitch on a Passap knitting machine. Another was knit in fingering/sock weight yarn using a different tuck stitch on a Brother standard machine. The third was done in sport weight yarn on a Studio mid-gauge machine.



But even we were surprised when someone stacked them up just to make them neater, and we realized how close we had all come to getting them knit to the same size.



What Knitter's Tool Chest is NOT

I need to stop right here for a moment and tell you what Knitter's Tool Chest is NOT. Knitter's Tool Chest is not Designaknit. DAK is a great program. I should know. I own, use, and love DAK. Neither is Knitter's Tool Chest Knitware, Sweater Wizard, or EnvisioKnit. This program won't draw you a diagram of a sweater you design or load information into your knitting machine. However, Knitter's Tool Chest will help you in some ways the other programs won't.

Here is a list of things you CAN do with Knitter's Tool Chest:

1. Store the location of those patterns you wish to knit in the future and locate them quickly when you are ready. (Also articles on knitting techniques and stitch patterns. Also stitch patterns you've designed that you'd like to find quickly when you are ready to use them.)
2. Store measurements of those people for whom you wish to knit.
3. Search for patterns by criterion you've set.
4. Store information about your yarns, and search by color, thickness, or fiber.
5. **Stop trying to match someone else's gauge!** Recalculate a pattern that's the right shape, using a different yarn, stitch pattern, or both.
6. Easily make garments that fit those for whom you are knitting.
7. Calculate how often you must increase or decrease along a diagonal, curve, or evenly spaced across a row OR space vertical buttonholes.
8. Reuse the data from projects you've entered and knit previously by changing only those elements (yarn, recipient measurements) that need changing, and do it in minutes.

Working with the program

Please don't try to enter all your patterns and yarn you own right away, and never add patterns you don't like. You don't want to be a data drudge. You want to knit beautiful things. When you are perusing a new book or magazine and come across something you just know you'll want to use someday, enter ***patterns and articles from that book that you will want to find again in the future***. Or, wait until you are already searching for a pattern. As you find ideas to use in the future, add them. Then continue your search for the pattern you were seeking. Enter yarns the same way. As you search your stash for another reason, enter the data from the yarns you are going through.

I have a knitting friend who said she'd like to use Knitter's Tool Chest, but she had already entered all of her yarns and knitting books into Ravelry's site. Of course, she shouldn't have to enter data twice. (It's bad enough entering it once.)

However, if this is your situation, don't use Knitter's Tool Chest for storing all the patterns you'll search and all of your yarns. Instead search them on Ravelry, but use Knitter's Tool Chest to calculate your projects...especially if you are using yarn that isn't the one specified, or if you want to knit your own gauge.

One last thought. My friend, Patty, came to our knitters meeting one night and proudly announced that she had finally learned to make wash cloths on her knitting machine. Then she said, "The first one took four hours. The second took 18 minutes." Your first project won't happen fast, but when you get used to using Knitter's Tool Chest, it won't take long, and making the second version of something in a different size, yarn or stitch pattern will happen very quickly.

Please don't think that the way I'm suggesting you use this program and the answers it gives you are absolutes. You don't have to define "Book" the way I define book. This is a suggestion to use a hierarchical filing system. It works well for me and I suggest you try it. You can decide I'm wrong and develop another method.

You will notice that many of the numbers generated by Knitter's Tool Chest have several decimal places. I have not done the rounding for you. You will determine whether to round up or down based on your knowledge of your pattern. The first time you make one of these decisions will be hard. Each time will get easier.

Now it's your turn. We have tools to help both hand knitters and machine knitters. I hope you enjoy working with Knitter's Tool Chest and have fun knitting MANY beautiful things that fit wonderfully and look just as you'd hoped.



Glossary

I speak American English with a slight Minnesotan accent. I worked on the fringes of the Information Technology field for many years, so I have a nasty habit of speaking "Jargon", and I may assume you know more about computers than is fair.

Here are some terms used in this manual and in the program.

Books - These can be actual books, or magazine titles, or a collection of

books, File Folders, ring binders, CD's or floppy disks. This has been one of the most difficult things to explain for this program, so please consider reading this section AND the "Books, etc." tab on the Mini-manual (found at the bottom of the program's Homepage.) If you still don't understand what I mean by a Book, check the Hierarchies section on page 40.

The photo inserted here may show a group of over 20 magazines, but these are all patterns published by Brother, so I group them all into one BOOK called "Brother".

The same would hold true for all publications from Vogue or Interweave. I would have a BOOK called Vogue and a BOOK called Interweave. When you reach the section of this manual describing how to enter patterns, You will see more about this AND about how to differentiate between Issues/Volumes of a "Book."

Check the Table of Contents for the section on Hierarchy near the end of this manual.

Cell - also called a "field." A box on a form for entering/selecting data. After entering your data in the cell, press the TAB key on your keyboard to leave this field, save the data, and move to the next cell, or you can click into the next field with your mouse to accomplish the same thing.


Calculated fields - Calculated fields have a lightly shaded background like this




. These boxes won't let you type anything, but will reveal answers once all supporting information is entered elsewhere.

Double click - quickly click twice with the left button on your mouse.

Drop down list - Most of the fields on forms are the kind where you type information. Those will have a plain white background. However sometimes the information called for has already been entered on another form or

by us. These fields will look like this .

Click on that inverted triangle at the right end and a list of items will appear below the field from which you will select (click on) the answer you choose. You can also start to type the word you want and the program will start to guess what you want. Press the TAB key on your keyboard as soon as the correct data is displayed in order to accept the entry and move to the next field. There is a second type of drop down list, and those fields

will look like this:  Fields with this background will allow you to ADD information as well as look and select. If the item you are entering is NOT on the list, you'll be asked if you want to add that to the list. Click on "Yes" in the little pop-up window, and your new data will be added.

Field - also called a "cell". A box used to enter, select or view data. TAB when done to save the information you entered and move to the next field.

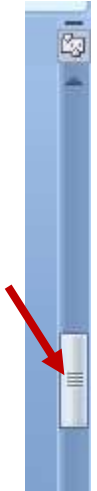
Form - the screens that open for data entry and to display information.

Info - information

Report - a printable collection of information about your work here.

Right Click - click once on the button on the right side of your mouse.

Scroll - use the "scroll bar" at the right edge of a form or screen. Click on the bar (see red arrow to the right) and drag it up or down to move quickly through information.



UofM - Units Of Measure (centimetres, metres and grams or inches, yards and ounces) - This term covers the way you measure things and/or the way the author of a knitting pattern measures things. It is important to know that in MOST calculations found in Knitter's Tool Chest, the maths are not specific to metric or imperial measurements. If you are on a form where UofM is a required field, however, selection of cm or inches is needed in order to determine how calculations will be done.

Go to Homepage button - Each form will have a "Go To Homepage" button in the upper left corner. Clicking on this button will return you to the main Homepage.



Navigation buttons - Use buttons like those below to move back and forth through stored patterns, yarns, projects, etc.



The two smaller arrows in the middle will go back or forward one

record/item at a time on the list.



Many forms will have two buttons that look somewhat like this one. The words will probably be different, but if you see a button with letters of this color on a form, it will take you to a previous or next step in the process.

Important Note: I may sound, at times, as though every piece of data for which I've created a cell is *required*. I need to clarify that, because there's a difference between things required in order for the program to function and data to save, and something that's required to make certain calculations work. *Assume the first group of fields on any form is required* for anything to save. Beyond that, I've tried to specifically point out "required" fields.

If you are entering swatch data on the My Current Project form and don't have a scale to weigh your swatch, you *can* skip that cell. The program and the My Current Project form will continue to work. However, the calculation of "Skeins Required" will not work, because that calculation needs ALL of the yarn data, swatch data and rectangular pattern section data to calculate the square UofM in the garment, how many stitches & rows in a square UofM, how many grams 1 sq. UofM weighs, and then how many skeins of yarn are required to knit the entire garment.

Getting Started

When you open Knitter's Tool Chest, you will see the screen shown below. This is your Homepage. You will have access to many hints and tips by clicking on the "Mini-Manual" button across the bottom of the Homepage (shown circled in green below.) The full manual you are reading covers things in much greater detail. If you don't find what you need inside the program, come back to check the Table of Contents.



Next, click on buttons on the Homepage to visit the different screens so you can see what is expected when you use the program. When you begin entering information, consider doing so in the order of the "Make entries" buttons. The reasons for this are that the forms later in the process need information that was entered on earlier forms.

I **strongly** recommend that you start with a project you've already completed at least once, because you know what you expect to see returned by this program. (You know how many skeins of yarn you used, and the size the project turned out.) This will help you judge how accurate this program is in the calculations it returns to you about that project. If there are differences, can you think of a reason? Did you need extra yarn because something happened? Could that happen again?


Once you've finished entering pattern info, yarn info, recipient measurements, swatch info, and pattern sections for this one project, you'll know the amount of effort involved in building a project from scratch. Then you can use that information to very quickly build your next iteration of this pattern. We'll show you how to accomplish the second use of a pattern in a fraction of the time it takes to build the first, even if you make it for a different person of a different size, while using a different stitch pattern and yarn.

Entering a New Pattern

Click the "1. New Pattern" button on the Homepage and you will see this screen:

The screenshot shows the 'Pattern Entry' form with the following details:

- Go To Homepage** button in the top left.
- Text: "Store information below about a pattern you like, so you can locate it whenever you wish."
- Pattern Entry** title in the top center.
- Go To Homepage** button in the top right.
- Pattern #**: 28
- Select the book with this pattern from the drop-down list**: Vogueknitting
- Issue/Date**: Winter 2007-08
- Page**: 99
- Pick a category**: Lady's
- Pick a sub-category**: Top
- Description**: Is there anything else about the pattern you'll want to see when you are searching for it?
Instructions p135 (Pattern #31) Shifting Rib Pullover
- Image**: A photo of a person wearing a blue shirt.
- Select the AUTHOR's method of measuring (UofM) below**: Centimetres (selected), Inches.
- Suggested Yarn**: Loft Classic by Zitron/Skacel
- Suggested Machine/Needles**: HK 9
- Author's swatch data goes here >>>**
What gauge did they say you must knit?
Stitches: 22
Width: 4
Rows: 23
Height: 4
- Comments**: Stunner! Slimming, tool
- Buttons at the bottom: **First Pattern**, **Latest Pattern**, **Add New Pattern**, and **Add New Yarns** (indicated by a blue arrow).

Of course, your form will be blank...awaiting the patterns in books you own. Fields that look like this  indicate a drop down list. You can access information on the list by clicking on the inverted triangle at the right end of the field OR by beginning to type the information. The three "drop down lists" on this page show lists of options Books, Categories, and Subcategories. In the beginning, you'll be adding information to empty (or almost empty) lists, but if you are typing something that is already on the list, it will automatically appear. The program will "guess" that you're typing something again. If it guesses correctly, simply press the TAB key in the upper left corner of your keyboard to accept the information and move to the next field.

Next I'll show you how I entered my information onto this page:

Field Name:	Suggestions for entry
Book/magazine: <i>See Hierarchy section for more on Books, Issues, Categories, and Subcategories</i>	Type the name of a book, a collection of books (like Lily Chin knitting books), a book/magazine collection (like Vogue or Interweave), or make up your own collection (like My Downloaded Patterns, Stitch Patterns, DVD's/CD's, File Folders, etc.)
Issue/Date:	I use the reference I found on the magazine, like "Issue 1, Vol. 10" or June 1997. When I refer to a book in a collection, I'll enter the part of the title that makes it unique. (Example: If your Collection/Book name is "Lily Chin", the Issue could be "Expressions" or "The Urban Knitter." For personal disks of stitches, you may wish to enter a name or number to identify the disks.)
Page:	I enter the page number or a pattern number if the book numbers its patterns. For discs, you may wish to enter pattern #, track # or name.
Category:	My personal categories included things like Lady's, Men's, Adult, Teens, Children, Boy's, Girls, Stitch Patterns, Techniques (articles or saved printouts). You get to name them as you wish.
Subcategory	Many categories use the same subcategories, like Sweaters (Jumpers), Vests (Waistcoats), Tops, Jackets & Outerwear, Hats & Mittens, Scarves & Shawls, etc.

Description:	Especially if you are building a record of a Technique, you want to write description here. Later when you search for stitch designs and techniques, this will be your best clue since the scanned image of an article seldom reveals enough details.
Image: See p. 26 for hints on how to do this	IMPORTANT: Although it is physically possible to add multiple images to one image field, it can break the program, so please don't do it. Double click into the field where the scan/photo will be placed and "browse" to the location where you saved your image to select and load it. (I have built an Image folder in my "My Pictures" library on my computer. Inside the Image folder, I have sub-folders for each "Book" where I've stored images of garments, yarns and articles. I name each image file with an abbreviated Book, Issue, Page name. It helps me.)
Author's Unit of Measure:	Enter the <i>AUTHOR's</i> chosen UofM here. If you think in centimeters and the pattern is in inches, don't let that scare you off. Later on we'll help you quickly and easily convert patterns written for a different audience.
Suggested Yarn:	Enter brand and name suggested in the pattern.
Suggested Machine/Needles:	If the author specifies the size or type of equipment used to create the pattern, enter that information here.
Swatch Information: Needed if you will build a schematic from written instructions	Enter the <i>AUTHOR's</i> swatch data here. Stitches & Rows per UofM along with the height and width of the swatch, especially you will use the Schematic Builder.
Comments:	Type whatever you wish in this space.

Required information, used in calculations, good to have but not required.

When you need to edit forms:

You just realized that you need to change some data you've entered OR you've entered the same pattern (or yarn, or whatever) twice. What can you do? You can edit. You are allowed to type different information into any of the fields where you made entries. Of course, you won't be allowed to edit calculated fields, but as soon as you enter the data used in those calculations and TAB to the next field, the calculation will run again. If you have two copies of something, just use one of

them for a different pattern, yarn or whatever. Type new information into all the fields and you will have re-used the form.

This is your program. It was designed to help you. Nothing you've entered is anchored in cement. You are allowed to change things.

When you need to edit lists:

The day will come when you want to edit the list of Books, Categories, Subcategories, Yarn Brands, or Yarn Sources. You'll decide you named one of these wrong. Please take things slowly. For this reason, there is a button in the center panel on the Homepage that will take you to a form where you can do this.

Before you delete anything, please consider doing things in this order. If you are ONLY making a spelling correction to a book title, you should be fine by simply making the correction. However, if you are bringing multiple listings underneath a single title, please do the following:


1. Add your new listing.
2. Visit the Pattern Locator or Yarn Selector forms (also reached via buttons in the center panel) to search for items using the old term.
3. Go to the full page entry form for each item and change the term in question to your new term.
4. If you are going to delete the old term, wait until there are no more items using it.

Yarn Entry

Most knitters have some "stash." There are yarns we bought because they were too beautiful to leave in the store, or that we bought for a project that didn't get completed...in some cases it didn't even get started. Wouldn't it be great to know what you own when you see that next inspiring pattern? You may already have the perfect yarn. Wouldn't it be nice to use the information about that yarn to discover if you can complete the project from stashed yarn, or if you'll fall short and need to do the neckline, cuffs and waistband in a contrasting color? Scroll down when on the Yarn Entry form. We added a chart of ways people have measured yarns over the years (great for helping with older yarns.)


Go To Homepage

My Yarn



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2012

Go to Pattern Entry

Yarn Name:	Nature Spun Sport	Yarn Photo:	
Color Family:	Browns		
Colorway:	Sedona Sunset		
Main Fiber:	Wool		
Thickness:	Sport		
Yarn Brand:	Brown Sheep		
Yarn Source/Store:	Miss Elsie's Yarnery		
Price per skein/cone:	\$22.00	YPP:	1656
Skein/Cone Wt. Type:	ounces		
Skein/Cone Weight:	16		
Skein/Cone Measure Type:	yards		
Skein/Cone Length:	1656		
How many skeins/cones do I own?:	2		
Notes:	Dye Lot: 1-05-10 003		

Go to first entry

←

→

Go to last entry

Add New Yarns

Go to Recipient Measurements

Click this check box when you have used up your supply of this yarn.

Chart of Yarn Comparisons

Meters
Ply count
Approximate
Craft Yarn Council
KNITTING MACHINES THAT

Field Name:	Suggestions for entry
Yarn Name:	Enter the name of the yarn, not the manufacturer.
Color Family:	Pick a color family that seems dominant.
Colorway:	Describe the color in your own words, or use the clever color name the manufacturer gave it.
Main Fiber:	Pick highest percentage/most important fiber content. If the yarn were 50% wool/50% silk, I'd enter silk because its more rare.
Thickness:	Pick from lace, light fingering, fingering, sport, etc.
Yarn Brand:	Enter the manufacturer, or select from the drop down list. Press TAB if the program guesses correctly.
Yarn Source/Store:	Where did you buy this yarn? (You may want more someday.) "Gift" can be a source, too.
Price per skein/cone:	Enter what you paid per skein, especially if you ever knit for sale.
Skein/Cone Wt. Type: * Used to calculate yarn needs	Is the skein weight shown as grams or ounces? (If both are listed, you may choose.)
Skein/Cone Weight: *	Enter the <i>number</i> of grams or ounces

Skein/Cone Measure Type: *	Is the length of yarn in the skein in yards or meters?
Skein/Cone Length: *	Enter the number of yards or meters.
YPP (self calculating - will appear when skein info is complete)	Yards per pound. If you wish to see how thick this yarn really is compared to others, check this number against the chart at the bottom of this form. (Scroll down)
How many do I own?	Enter the number.
Dye Lot:	Enter if you wish.
Yarn Photo:	If you have a photo of this yarn, double click in the Image area & browse to find the image you saved. Double click to add, and OK to complete.
Notes:	Anything you want to know about the yarn. You may wish to enter the location of your yarn in your storage system, the exact fiber content, or washing instructions.

Required information, used in calculations, good to have but not required

Recipient Measurements

The first time you open this form, you will type the name of your first recipient into the name fields. When you return to this form later, select a name from the drop-down list to view an existing record OR click on the "Click here to add a new recipient" button to add someone new.

A series of "tabs" looking rather like file folders will allow you to enter and store measurements for the people for whom you knit. Enter a measurement in the field and press TAB to accept that and move to the next field. When you press the TAB key on the last data field on each page, you will be taken to the first data field on the next. The first tab has a space called "Notes:" for entering any measurement you consider important that we failed to put on our list. The illustration above shows the "Seated" tab in the series. Each tab has an illustration (always feminine) with numbered, colored lines showing where to place the measuring tape. The verbal description of where to measure is shown in approximately the same color as the line it represents. Click into the Notes: field on the Armhole tab to write

anything you need to save about this person's measurements. For instance, you may have a special way of measuring something that we didn't include. Just put that information in Notes.

Is the person being measured far away? You may print and send them their report in the mail OR even email them a copy of the report to print, fill out and return (maybe by scanning & emailing back.)

1. Select the recipient for this report OR if their record has never been put together, enter their name, date of measuring, and gender.
2. **To email if you use MS Outlook:**
 - a. click the "eMail Report" button
 - b. An email opens with the attachment in place, ready for your message to be added. (In case you need to send the link so your friend can get a copy of Adobe Acrobat Reader, here it is to copy and paste into your message: <http://get.adobe.com/reader/>)
3. **Using different email?**
 - a. Click on "Save Report - PDF" - This will save a copy of the report to your desktop, and it will offer to use the generic title which will overwrite any old reports already on the desktop. (You will have an option to save it elsewhere with a different name if you desire.)
 - b. Go to your email program, write your message and ATTACH the report.
4. **To mail a report**
 - a. Follow the instructions to use different email, but print the report you saved and place it into an envelope.

Finding what you've entered when you need it

Find that perfect pattern again...quickly

Pattern ID	Book Name:	Issue:	Page:	Description:	Image
122	Machine Knitter's Source	Feb 2003	14	"Snake Skin" of chenille & metallic	
164	Machine Knitting News	May 1998	24	Interesting neckline and sleeve	
21	Vogueknitting	Spring/Summer	64	Instructions begin on p. 93	
28	Vogueknitting	Winter 2007-08	99	Instructions p135 (Pattern #31) Shifting Rib Pullover	
189	Vogueknitting	Downloaded	Scallop		

Write down the Pattern ID# for the project you will make. Then click here and go directly to My Projects

It's time to find out why you went through all that work. So let's go find something we've already entered. Earlier, I showed you a sample page of a pattern for an interesting blue cable Lady's top (the category and subcategory I used.)

Return to the Homepage. In the middle section, called "Find things I've entered," click on the "Patterns" button. The form that opens looks really useless, but there is a list of categories you've entered in the upper left corner. Click on a category (I'll select "Lady's"). Subcategories appear along with an "Undo" button in case you chose the wrong category the first time. I'll choose "Top". The illustration shows you what I saw when I selected "Lady's" and "Top" and scrolled. As soon as a category AND subcategory have been selected, the result of the filter appears and the system resets itself for the next choice. Now you can see exactly what book it's in and what page it's on. Want to see the full Pattern Entry page for it? Click on the button that says "To Pattern" on your chosen pattern. In my personal library, I keep collections of magazine titles together in my bookcase, so I can just walk over, select the issue in question, and open to the correct page.

When you've found the pattern you want to use for the project you will make, write down the Pattern ID# (the blue top in the illustration is #28). You'll need this for the My Current Project form or the Schematics Builder form.

Shopping your own yarns first

Return to the Homepage. Click the "Yarns" button on the middle section and visit the Yarn Selector form. Again you will make a selection in the upper left corner of the screen and the yarns that fit into that filter group will appear. The example below filters for "Fiber" and "Wool." There's a "To This Yarn" button to take you to that item's Yarn Entry page.


Yarn ID #:	Yarn Name:	Brand Name:	Color:	Thickness:	Fiber:	
18	Kaleidoscope, Waterfa	Blue Ridge Yarns	Blues	Fingering	Wool	
Notes: Merino Superwash, blue varigated						
To This Yarn						
19	Itata Multy, Blues	Araucania	Blues	Fingering	Wool	
Notes:						
To This Yarn						
20	Itata Multi, Golds	Araucania	Yellows	Fingering	Wool	
Notes: Save this for a nice top - accent area						
To This Yarn						
22	Wildefoot, Tom Cat	Brown Sheep	Blues	Fingering	Wool	
Notes:						
To This Yarn						
23	Wildefoot, Mums	Brown Sheep	Browns	Fingering	Wool	
Notes:						
To This Yarn						
24	Wildefoot, Forest Fog	Brown Sheep	Blues	Fingering	Wool	
Notes:						

Write down the Yarn ID # for your selection, too. You'll use this on the My Current Project form.

Using the My Current Project form

You've been entering a lot of information. You've found the pattern and yarn you'd like to use. Now let's bring everything together so you can make the item you want to make.

The button for My Current Project is in the first section on the Homepage. When my form opened, I navigated to the next illustration (yours will be blank):

[Go to Homepage](#) **My Current Projects**  Table 01 (October 2017)

Project Name: Galen's Vest #2 **My Swatch Gauge:** Stitches: 7.27273 Rows: 12.5 per square UofM

Pick the yarn to use: 21, Tamm, Diamante, Maroon, Brown

Pick the pattern to use: 16

Machine or Needles Used: Brother KH-965i w/ G-carriage

(MK) Main Tension: 7

Select Recipient Here: Galen Ferguson

Swatch Measurements:

Items #1-7 to the right are done after washing and blocking the swatch. (HK knitters first enter pre-wash measurements on HK Swatch tab.) Items #1-4 use only the area used to determine gauge. Items #5-7 use the entire swatch edge-to-edge.

1 Stitches:	50
2 Width:	6.875
3 Rows:	50
4 Height:	4
5 Total Width:	8.125
6 Total Height:	5.1875
7 Weight (grams):	12.2

Start Date: Finish Date:

Notes: Click here when project is finished:




Rectangular Section Name:	Width:	Height:	Stitches:	Rows:	#
Back - Waistband	20	3	145.45	37.5	1
Back - Main Section to armhole	20	13	145.45	162.5	1
Back - Upper middle between arms	14	10.25	101.82	128.13	1
Back - armhole decrease area	1.5	2.125	25.455	26.563	2
Front - waistband	10	3	72.727	37.5	2
Front - main section to armhole	10	13	72.727	162.5	2
Front - neckline decrease area	3.5	10.25	25.455	128.13	2
Front - shoulder width between	3.25	10.25	23.636	128.13	2
Buttonhole Band	1.5	56	10.909	700	1
Armhole Banding	20.5	1	149.09	12.5	2
Front - armhole decrease area (L & R)	1.5	2.125	25.455	26.563	2

Total Project Square UofM: 1076.625

Skins Required: 0.05

[Print Current Project Report](#)

Name each rectangular pattern section, enter the height & width. If you need to make more than one of this piece for this project, enter the # to make.

Photo 1: Photo 2: Altered Schematic:  Patterns:  Yarn: 

[First Project Entered](#) [Most Recent Project](#) [Add New Project](#) [View recipient report](#)

Start by giving your new project a name. (Please consider using a project you've already done for your first entry OR use our Step-by-step Project Sample found at the back of this book. (Using a former project of your own does mean you'll need to have added the pattern, yarn, and recipient data to the specified forms before proceeding.) Type the name into the "Project Name:" field.

Select your yarn from the drop-down list. (You entered the number on the My Yarn form and wrote your selection when you searched the yarns.) When you select the yarn number from this list, the photo of the yarn will automatically appear in the images at the bottom of the form.

Pick the Pattern number you've decided to use from the drop-down list. Again, the image appears automatically.

The next field is entitled "Machine/Needles Used:", so enter the knitting machine or the hand-knitting needles you will use for this project, even if that's different from those recommended by the author.

The "(MK) Main Tension:" field will be used only by machine knitters to enter the primary tension used on their knitting bed. You hand knitters can skip this field.

Swatches:

We knitters have always dreaded making swatches. Well, the swatch is our very best friend, and you are about to discover that you will never again have to knit them over and over trying to match someone else's gauge IF you will make a good swatch and use this program.

Make a good swatch

What is a good swatch? Opinions differ on this.

I know people who knit a swatch to match the gauge shown in the original pattern, often 4" x 4" (10 cm x 10 cm). That is seldom enough swatch.

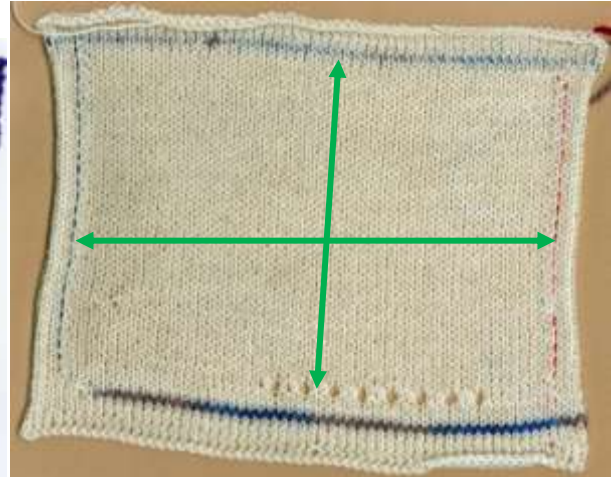
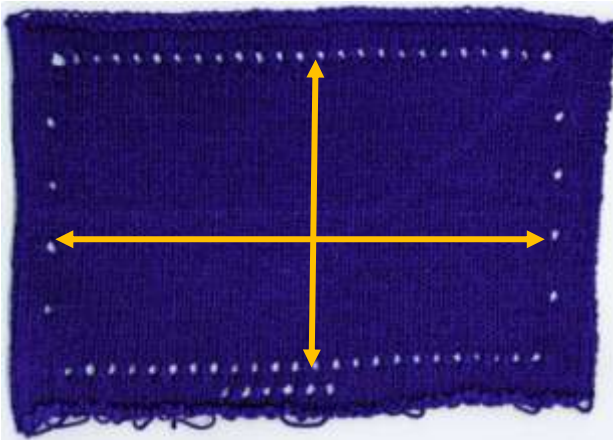
I know others who always knit 100 stitches by 100 rows and put in contrasting yarn around a certain number of rows and stitches or a 4" square or 10 cm square to define the "measured area." This is a wonderful swatch that can be draped on you to try on the pattern & color, but when I make a swatch this large, I'll include most of the rows and stitches in my "measured area" to get a better average for my gauge.

Knitter's Tool Chest will calculate the average number of stitches and rows per square Unit of Measure (centimeters or inches) no matter how many stitches and rows you include in your measured area. The more you include, the more accurate the average/gauge. My swatch pattern is a suggestion. You may make your swatch as you wish. Knitter's Tool Chest will calculate the gauge using the numbers you give it.

My swatch pattern

First I'll show you pictures of 2 swatches I've done. One swatch uses my K2tog/YO method of marking measured area by surrounding it with holes and the other I did long ago with contrast yarn. I now make most swatches like the blue on on the left, with a measured area of 50 st x 50 rows. The extra little row of holes at the bottom indicates tension for machine knitters or needle size for HK'ers.

Always allow a margin around the measured area to avoid distortion, but a 5-10 rows and stitches margin is adequate. You may wish to add a wider margin at the beginning of the swatch in which to place eyelets to represent tension or needle size.



The following pattern is what I usually use to make my swatches:

Cast on 60 stitches and knit 4 rows of garter/stockinet stitch. On the 5th row make a row of eyelets: knit 3, k2 tog (stitches 4 and 5), yo, *k8, k2tog, yo* repeat this pattern 3 more times for an eyelet row, OR you may knit this row with contrast yarn instead of doing eyelets. Knit until 5 stitches remain, yo, k2tog, k3. Turn and k5, knit in your project pattern until 5 stitches remain, k5. Repeat this until you have 9 rows in your pattern completed. On rows 10, 20, 30, and 40, k3, k2tog, yo, continue to knit in the project pattern until 5 st remain, yo, k2tog, k3. (You may wish to add the eyelet every 5 rows OR to carry contrast yarn instead of eyelets. It may be easier to keep the row count accurate. After knitting row 50 in project pattern + margin, turn and repeat the eyelet row. Knit 3, k2 tog (stitches 4

and 5), yo, *k8, k2tog, yo* repeat this pattern 3 more times for an eyelet row. Knit until 5 stitches remain, yo, k2tog, k3. Turn and knit 4 rows of garter/stockinet stitch. Bind off.

Pattern Sections | UofM Translator | HK Swatch | Magic Formula

Instructions for Hand Knitters usually have instructions to knit until a piece is "x inches/cms long." These instructions seldom, if ever, take shrinkage/stretch into account. For better fitting garments, you may wish to measure your swatch twice. (As always, I recommend knitting a swatch with a measured area of at least 50 st x 50 rows + margin of 5 st/rws on each side.) Immediately enter the size of the "measured area" below just as you take the swatch off your needles, and before you wash or block. Enter finished, blocked measurements on the main form to the left.

Width of Swatch Area (unblocked):

Height of Swatch Area (unblocked):

Size % of Unblocked Swatch Area:

Enter from Instructions - height of the piece you are supposed to knit:

This is the height of the piece you should knit for better fit:

Fractions & Decimals

1/16 = .0625
1/8 = .125
3/16 = .1875
1/4 = .25
5/16 = .3125
3/8 = .375
7/16 = .4375
1/2 = .5
9/16 = .5625
5/8 = .625
11/16 = .6875
3/4 = .75
13/16 = .8125
7/8 = .875
15/16 = .9375

Important information for hand-knitters

If you are a hand-knitter, immediately measure the measured area of your swatch as it comes off your needles. Then go to the My Current Project form, click on the "HK

Swatch Instructions" and fill in the height and width of the fresh swatch, using your preferred Unit of Measure. (Measure the height and width between the eyelets or contrast yarn.) If you made your swatch according to my pattern, your measured area will contain 50 stitches and 50 rows. (You cast on 60 stitches, but you have 5 stitches and 5 rows margin outside the measured area on each side.) If you made your swatch in a different manner, use the numbers you get using your method. *You don't have to knit your swatch my way to have this program help you.*

Washing and Blocking - VERY IMPORTANT: Wash and block your swatch just as you will treat the garment pieces later. Allow the piece to rest 24 hours after blocking is done, so the piece can relax into its final size. Measure the "measured area" of the swatch between holes or contrast yarn in multiple places. On the left side of the My Current Project form, enter the number of stitches and rows, average height and width of the measured area AND the average height and width of the entire swatch EDGE to EDGE, plus its weight in GRAMS. Watch your swatch gauge magically appear when you've entered items 1-4.

How to prevent the too long sleeve (and other stretchy surprises):

After you've knit, washed, blocked and measured your swatch, consider hanging it up on one of those pants hangers that clamps the trousers. Clip a couple of wooden clothes pins onto the bottom of the swatch opposite places that are supported by the clamp. Wait a while (no more than 12 hours is necessary, since people don't usually wear a garment longer than that), and WHILE THE SWATCH IS STILL HANGING, measure the height between the rows of eyelets.



Lay the swatch down to measure the width, since the clamp tends to distort the swatch in this direction. (If you are curious, re-measure the height to see how much the swatch will retract once it's laid down. Even if it's only 1/4", which is about .5 cm, and you have a 5" swatch, this can add up to an additional 1.25"/2.5 cm on a 25" sleeve.)

Go to Homepage

My Current Projects

Project Name: Myra's Wave Jacket Sleeves

My Swatch Gauge: Stitches : 7.05882 Rows: 30.6667 per square UofM

Pick the yarn to use: 27, Cascade, Ultrapima Fine, Greens

Pick the pattern to use: 297

Machine or Needles Used: Brother 970

(MK) Main Tension: 8

Select Recipient Here: Myra Erstorm

Swatch Measurements

Items #1-7 to the right are done after washing and blocking the swatch. (HK knitters first enter pre-wash measurements on HK Swatch tab.) Items #1-4 use only the area used to determine gauge. Items #5-7 use the entire swatch edge-to-edge.

1 Stitches: 60

2 Width: 8.5

3 Rows: 60

4 Height: 5.625

5 Total Width: 9.75

6 Total Height: 7.125

7 Weight (grams): 29.6

Start Date: Finish Date:

Notes: Click here when project is finished:

Pattern built in DAKB, stitch pattern designed there as well.

Total Project Square UofM: 1254.8

Skins Required: 30.88

Name each rectangular pattern section, enter the height & width. If you need to make more than one of this piece for this project, enter the # to make.

Print Current Project Report

View recipient report

First Project Entered Most Recent Project Add New Project

Rectangular Section Name:	Width:	Height:	Stitches:	Rows:	#
Sleeve Pockets	12	2	84.706	21.333	2
Sleeve Center	24	11.25	169.41	120	2
Sleeve Sides	2	11.25	24.118	120	2
Bodice	28	71	197.65	224	1
Sleeve Cast-on	28	0.6	197.65	6.4	2
Bodice Cast-on	2		24.118		1

The Total Swatch Height, Width, and Weight will be used in calculating the number of skeins of your chosen yarn required to make the pattern in your chosen size. (Of course, you also need to have entered the yarn information on the Yarn Entry form, and you'll need to enter the Pattern Sections on its tab...see the red arrow.) (NOTE: Inexpensive scales are available online, if not in local stores, that will weigh your swatch to 1/10th of a gram. Mine cost \$20 online and is about the size of a Smartphone in early 2013.)

Select your recipient from the drop-down list.

Enter your starting date for the project. You can skip the Finish Date and checkbox for finished project until you actually finish this item.

Enter any notes into the "Notes:" field. It may look small, but it can hold up to 32 pages of typing.

Double click into either of the Photo spaces, and you can browse to images you want to include with your project. Please note: Place the image of your altered schematic in the specified space. This will be used later by the Current Project report that you'll use while knitting this AND the Finished Project report that you'll use to make changes the next time you knit using this pattern.

Unit of Measure Translator Tab

Pattern Sections | UoM Translator | HK Swatch | Magic Formula

Enter Inches Get Centimetres

=

Enter Centimetres Get Inches

=

If the chosen pattern is written using Units of Measure (U of M) with which you are not fluent, use the spaces above to translate measurements.

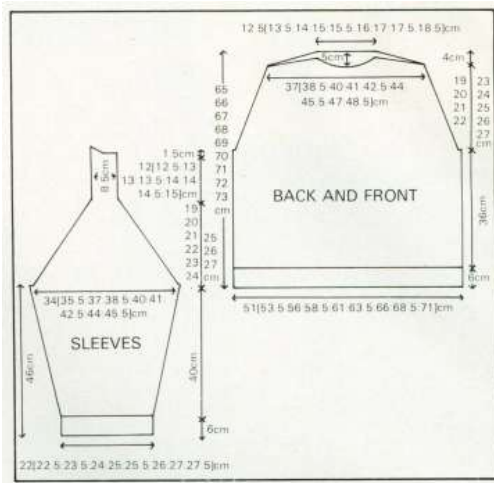
Use the left space below as a calculator for your pattern conversions. Then click "=" for the answer. Add (+) Subtract (-) Multiply (*) or Divide (/)

 =

Fractions & Decimals

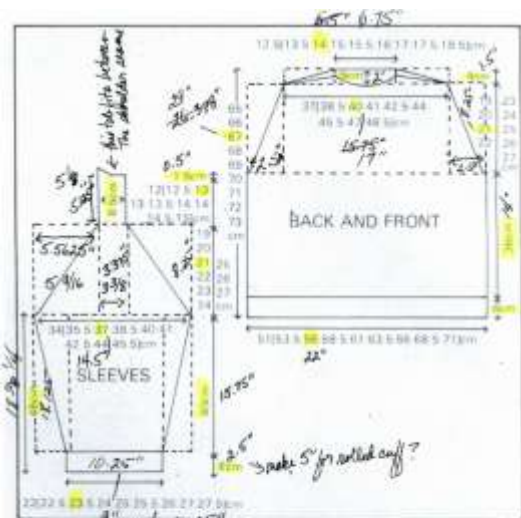
1/16 = .0625
 1/8 = .125
 3/16 = .1875
 1/4 = .25
 5/16 = .3125
 3/8 = .375
 7/16 = .4375
 1/2 = .5
 9/16 = .5625
 5/8 = .625
 11/16 = .6875
 3/4 = .75
 13/16 = .8125
 7/8 = .875
 15/16 = .9375

If you select a knitting pattern that is written using inches when you think in centimeters, or visa versa, you will just love this tab. It only does 3 things, but it does them quickly. Enter inches in the first field and learn how many centimeters that equals. On the next row, enter centimeters to get inches. The bottom field acts like a simple calculator. Enter a calculation. Press the ENTER or TAB key, or click on the "=" with your mouse and the answer appears.



Pattern Sections - converting the pattern schematic into rectangles

This is the most challenging and rewarding part of this program, and it's the reason I ended up building Knitter's Tool Chest. I recommend that your first project should be a pattern with which you are familiar, because that will help you concentrate on the parts of this that are different, rather than concerning yourself dealing with an unfamiliar pattern, too.



Scan the schematic of your desired pattern into your computer. Pull it into Microsoft Paint or another graphics program (Photoshop works great, too). Remove everything except the schematic by using the crop tool. Enlarge the image to print

Adjustments for length:
 Shoulder points are 17" wide upper portion of back & front
 Hand measures 10.25" around @ knuckles - enlarge sleeve cuff
 Lengthen sleeve a smidge below arm pit
 Lengthen body to 30" from neck to hem

large on a sheet of paper, save this image as a .jpg file. Print out a few copies of it. (It always takes me more than one try to get it really right.) While you're at it,

Pattern Sections	UofM Translator	HK Swatch Instructions			
Rectangular Section Name:	Width:	Height:	Stitches:	Rows:	#
Back - Waistband	20.5	3	149.091	37.5	1
Back - Main Section to armhole	20.5	13	149.091	162.5	1
Back - Upper middle between arms	13.5	10.25	98.1818	128.13	1
Back - armhole decrease area	3.5	2.125	25.4545	26.563	2
Front - waistband	9.75	3	70.9091	37.5	2
Front - main section to armhole	9.75	13	70.9091	162.5	2
Front - neckline decrease area	3.5	2.125	25.4545	26.563	2
Front - shoulder width between	3.5	10.25	25.4545	128.13	2
Buttonhole Band	1.5	56	10.9091	700	1
Armhole Banding	20	1	145.455	12.5	2
Front - armhole decrease area (L & R)	3.5	2.125	25.4545	26.563	2

Total Project Square UofM: 1018.75

Skeins Required: 0.85

Name each rectangular pattern section, enter the height & width. If you need to make more than one of this piece for this project, enter the # to make.

print a measurements report (in the lower right corner of the My Current Project form or on the measurements form) for your recipient and calculate some vital statistics from inches to centimeters and the other way around. Find out which set of numbers on the schematic most closely fits your recipient. Are the planned sleeves long enough? Does your recipient like a close or loose fitting garment? Enter your recalculated numbers onto the schematic copy you printed.

Get a ruler or something with a good, straight edge, and turn the schematic into a series of rectangles. Then enter the height and width the rectangles will need to be when knitted and blocked into the Pattern Sections tab on the My Current Project form.

As you enter the height and width of the rectangle, also enter the number of copies you need to knit of this pattern piece. (Example: we usually need to make 2 sleeves that are identical in size and shape, but only 1 sweater back.)

You've just read the "Cliff Notes" version of how to do this. For some more details and different examples, move to the "How I Made Galen's Vest" section or "So, WHERE do I make rectangles????".

"Easing" into good fit

I'm going to talk briefly about a subject that is very important...ease. Ease is what allows your clothing to fit around you in a way that is comfortable for YOU. Some of us like clothing to cling closely, while others want garments that allow them to move freely inside their clothes. There are excellent articles out there on the subject. I'm going to just give you a "rule of thumb" learned at a seminar led by Lily Chin. If you like your garments to fit close on your body make the total of the pattern sections equal to, or even 1 inch less than, the body's measurement. Standard fit calls for about 1 inch of ease, or 1 inch more than the body's

measurement. Loose fit can range from 2" of ease on up. The best source I've found on standard measurements is from the Craft Yarn Council at this URL: <http://www.craftyarnCouncil.com/sizing.html>

Hand-knitters - Knitting for better fit

I accomplish most of my knitting these days on a knitting machine, but I'm a hand-knitter as well. I've been knitting by hand for over 40 years, and love it, too. After spending weeks (in my case, sometimes months or even years) carefully following directions for a hand-knit garment and carefully measuring each piece to knit it to the right length and with the right number of stitches, it's especially heartbreaking to find that the length is too short or long or the neck is too tight after the first washing. Maybe if I hadn't made it with that Marino wool instead of the silk yarn the pattern specified. But, I had matched their gauge!

Instructions for Hand Knitters usually have instructions to knit until a piece is "x inches/cms long." These instructions seldom, if ever, take shrinkage/stretch into account. For better fitting garments, you may wish to measure your swatch twice. (As always, I recommend knitting a swatch with a measured area of at least 50 st x 50 rows + margin of 5 st/rws on each side.) Immediately enter the size of the "measured area" below just as you take the swatch off your needles, and before you wash or block. Enter finished, blocked measurements on the main form to the left.

Width of Swatch Area (unblocked):

Height of Swatch Area (unblocked):

Size % of Unblocked Swatch Area:

Enter from Pattern Sections/Instructions - height of the rectangular section(s) you have knit PLUS the one in progress:

This is the height of the piece you should knit for better fit:

Fractions	Decimals
1/16	= .0625
1/8	= .125
3/16	= .1875
1/4	= .25
5/16	= .3125
3/8	= .375
7/16	= .4375
1/2	= .5
9/16	= .5625
5/8	= .625
11/16	= .6875
3/4	= .75
13/16	= .8125
7/8	= .875
15/16	= .9375

There's another variable that the hand-knit patterns seldom address. HKer's can only measure the length of the piece as it's being knit in order to match the length of the pattern piece in the pattern. The instructions tell us to knit until the piece measures X inches long. It doesn't say anything about knitting until the washed, blocked pattern piece will measure X inches long. Of course not! We can't wash and block the piece while it's still on our needles.

The HK Swatch Instructions tab asks you to make your swatch and

Swatch Measurements
 Items #1-7 to the right are done after washing and blocking the swatch. (HK knitters first enter pre-wash measurements on HK Swatch tab.) Items #1-4 use only the area used to determine gauge. Items #5-7 use the entire swatch edge-to-edge.

1 Stitches:

2 Width:

3 Rows:

4 Height:

5 Total Width:

6 Total Height:

7 Weight (grams):

measure it as soon as it's off your needles. Enter the height and width of the measured area of the swatch on the HK Swatch tab (green arrows.) Then wash and block your swatch. Allow it to rest for 24 hours, so it's relaxed into its final size. Then measure it

again, and consider hanging it up on a pants hanger to do this. This time you'll enter the numbers on the left side of the My Project form .

Calculate the number of stitches you'll need to cast on in YOUR gauge on the Pattern Sections tab, but use the HK Swatch tab to help you discover the correct pre-blocked length of any section so it will be correct after washing and blocking. Enter the number of inches high as indicated on the written pattern (or your calculations if you are adjusting to fit better) to see the length you should knit for your gauge to work.

The Magic Formulae

One of the hardest parts of changing a knit pattern is calculating the number of times you need to increase or decrease, or how many rows to allow between buttonholes when you've just changed the gauge.

Well, that isn't true anymore. We've included four Magic Formulae in Knitter's Tool Chest. With this tool, and because we've learned how to turn our pattern sections into rectangles, the job just got MUCH easier.

The Magic Formula tab is on the My Current Project form, and it looks like this.

My Current Projects

Project Name: George's Saddle-shoulder Polo

My Swatch Gauge: Stitches : 7.14286 Rows: 9.30213 per square UofM

Pick the yarn to use: 3, Araucania, Itata, Whites

Pick the pattern to use: 8

Machine or Needles Used: Brother 970 w/ ribber & motor drive

(MK) Main Tension: 8

Select Recipient Here: George Dorlan

Swatch Measurements	1 Stitches:	50
Items #1-7 to the right are done after washing and blocking the swatch. (HK knitters first enter pre-wash measurements on HK Swatch tab.) Items #1-4 use only the area used to determine gauge. Items #5-7 use the entire swatch edge-to-edge.	2 Width:	7
	3 Rows:	50
	4 Height:	5.375
	5 Total Width:	7.875
	6 Total Height:	5.625
	7 Weight (grams):	13.4

Start Date: Finish Date:

Notes: Click here when project is finished:

Photo 1: Photo 2: Altered Schematic: Pattern: Yarn:

Triangular Shape Increase or Decrease

UofM @ Widest Point: 2 1 stitch each 8 Rows 9 Times
 UofM @ Tallest Point: 11 and 1 each 7 Rows 4 Times

Round Neckline Check this box IF doing one side only

Center stitches bound off or held 19

UofM @ Widest Point: 8 decrease 1 stitch per row 9 Times
 Enter width of both halves, even if doing only one side decrease 1 at every other row 5 Times
 decrease 1 stitch every 3rd row 5 Times

Evenly Distribute Inc/Dec/Button(hole)-Horizontal/Stitches

UofM beginning width: 14 # of st to Inc/Dec: 10
 K 5 , *Inc/M1, K 10 * 10 times, K 5
 K 5 , *Dec/k2tog, K 9 * 10 times, K 5

Evenly Distribute Button(hole)-Vertical/Rows

UofM from bottom of lowest to bottom of the top buttonhole: 18
 # of Buttonholes: 8 Rows between bottom of one to bottom of next: 23

First Project Entered Most Recent Project Add New Project View recipient report

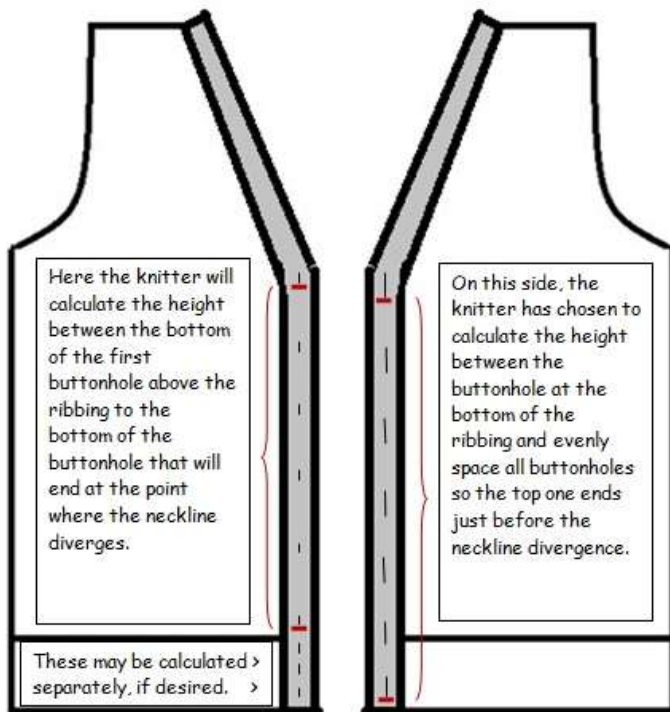
In the illustration of the Magic Formula, I've used all the formulae. The Magic Formula uses the stitch gauge for the current pattern in use, and I wanted you to see the numbers used for gauge in these calculations.

Before these calculations can work, you must have finished all entries up to this point, including swatch data to get gauge, and the rectangular pattern sections so you'll know how wide and/or tall the areas are that you wish to calculate.

Then, all you have to do is enter the width and height of the area you want included in the calculation for a triangular section, and only the width for a rounded neckline or $\frac{1}{2}$ round for an sleeve opening. For instance, if the triangles for the sides of the sleeve were 2 inches wide and 11 inches tall (I use inches as my UofM), I would enter 2 in "UofM @ Widest Point" and 11 in "UofM @ Tallest Point" to see how often I need to increase along the edge of the sleeves. Assuming my gauge is as shown above, the program would return the information that I need to increase 1 stitch each 8 rows 9 times, and 1 each 7 rows 4 times. The triangular calculator can also be used to calculate V-necklines. (If you are doing something with equal size slants both sides, simply do the same increases or decreases at both ends of the knit row.)

Again, in the illustration, I have entered a Round Neckline opening that is 8 inches wide. Actually, the neckline can be any depth you wish. If there aren't enough rows to do the entire curve, you may need to decrease more than 1 stitch per row for a few rows. (In our illustration, the instruction is to decrease bind off 20 stitches in the center, and then decrease 1 stitch per row 10 times, then 1 every other row 5 times, and finally every 3rd row 5 more times. Remember this is a suggestion, not an order. You can decide to do things differently.

There is a tool to help you decide how to do those pesky "evenly distributed" increases and decreases. With this tool, enter the width of the piece before making any changes, and the number of increases or decreases you need to make.



In either situation, the height of the buttonhole area begins at the bottom of a buttonhole, and extends to the bottom of the uppermost buttonhole in that group. The user determines how tall the buttonholes will be and allows room above the bottom of the uppermost buttonhole to complete that buttonhole in the space allowed.

build a schematic directly from the HK pattern, to determine if the result will be what you expect before you even start to knit?

The Schematic Builder form can help you do just that. It won't draw the schematic for you, but it will calculate the width and height of the pieces being knit by using the gauge from the original pattern and the number of stitches and rows specified in the instructions. If the pattern says how tall a knitted piece will be at a certain point, you can enter that height in the "Height, if given in pattern" space. When you've finished entering the data for a pattern piece, just click on the "View Schematic Report for this pattern piece" button and it will show you a piece of graph paper with the resulting numbers. Click on the printer icon to print out your report and graph, so you can plot the width and height of each section where the stitches remain the same. Then you can connect the dots you've plotted to draw your schematic.

Keep a scratch pad handy during this process. You'll write things down rather frequently

Finally, we have a formula to help you decide how many rows to knit between starting each buttonhole. If your sweater has ribbing around the bottom, you may wish to place at least 2 buttons on the ribbed portion, and calculate the rest of the buttonholes separately to avoid gaps.

The Schematic Builder

Have you ever read a hand-knitting pattern and wondered if the instructions could *really* deliver what was pictured? Often, they don't include a schematic. Even patterns *with* a schematic can yield a garment of a different shape from what is shown. Wouldn't it be nice to

Go to Homepage

Schematic Builder

Go to Pattern Entry Form

1. Select the pattern number needing a schematic from the list **12**

2. Which UofM works for YOU? Centimetres Inches

(Required field - SELECT ONE)

Author's Pattern Gauge is: Per:

Stitches on Needles	Width	Rows to Knit	Height of rows	Height, if given in pattern
83.00	11.67			8
87.00	12.23	4.00	0.44	
89.00	12.51	10.00	1.09	

Use the entries at the left to discover the intended width (and height if not given) of the original pattern pieces at each point where the stitches on needles changes.

When you've finished entering the numbers of stitches on the needles, print out the Schematic Report. It will be a blank grid with the numbers from this form. Use that report to plot the width and height of the pattern sections. Then play "connect the dots" to build your schematic.

When you leave this form, all information entered here will be deleted and the form will reset to blank. You will use the schematic you chart to continue building your project.

[View the Schematic Report for this pattern piece](#)

This is a single use form. When you leave, the information is cleared from the form and its underlying table. So, be sure you are done using it before you leave or you'll have to re-enter the data.

This form can also be used to determine the size of a pattern dimension that was left off of the author's schematic.

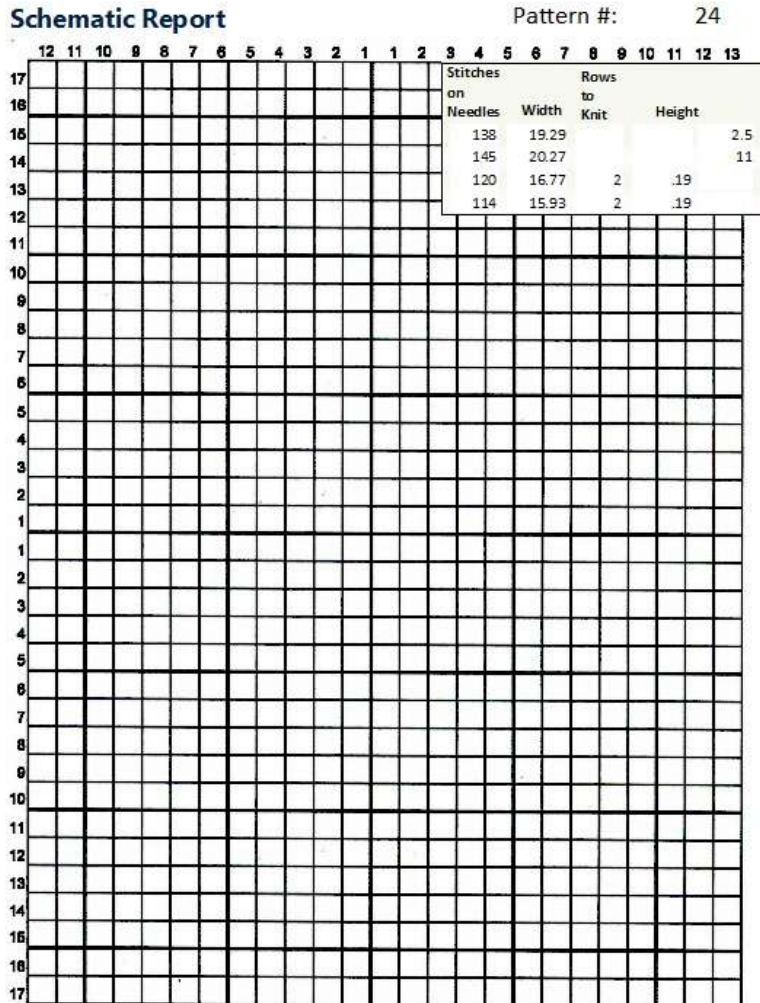
How to use the Schematic Builder

If you haven't already entered the pattern in the Pattern Entry form, start there, but be SURE to enter the **author's** swatch information on the Pattern Entry form. Then write down the Knitter's Tool Chest Pattern ID#. Move from Pattern Entry to the Schematic Builder form. Begin by entering the Pattern ID#. The gauge information from the original pattern will be automatically entered from the work you did on the Pattern Entry form. **Click to select your preferred UofM type. (Do you think in centimeters or inches?)** Even if the author used a different UofM, if you've shown their UofM on the Pattern Entry form and select your own UofM here, the calculations will translate the results for you. (On our illustration

for this form, the "Original Pattern Gauge" is shown as Stitches and Rows per "Cms" while the UofM selected is "Inches". The Width and Height will calculate inches in this case, because that's what I selected for my UofM.)

Next enter the number of stitches (also rows IF you aren't given the height of the pattern section) on your needles at each change point in the pattern piece. (Use the form for one pattern piece at a time.) Finally view the report with the click of a button, and if it meets your needs, click on the printer button to print it out.

You can use the report's graph pattern to plot the width and height of the pattern sections listed in the upper right corner. Add the increase/decrease shaping, and write the UofM measurements around the schematic. After plotting, connect the dots to draw the pattern outline.



Reports in Knitter's Tool Chest

Knitter's Tool Chest has several reports built in to help you work better and faster. Some are found on the Homepage in the far right column, but others were more logically found on one of the forms, so that's where you'll find them. Most reports will open in Preview mode. Once you've opened a report, you may wish to

print a copy. Look for the Print icon  on the form to print its report.

List of Reports included in Knitter's Tool Chest:

Examples shown next 2 pages)

Report Name	Location	Purpose
1 - Pattern Entries (Sorted by Book, and showing how many patterns were entered)	Homepage - Get Reports	Check whether you've already entered patterns found in a book, magazine, CD, or disk, and how many patterns were entered from it. Avoid searching books time and again. (If you want to see entries from one single book, select the book from the drop down list and then click on the "View All Patterns Entered from the Book Selected Below" button.
2 - My Current Project Data	My Current Project - Pattern Sections Tab	This is a great guide while knitting your pattern. You'll have a place to keep notes on Increases/decreases, buttonhole placement, and you won't need to write out the gauge, needles/machine, stitches & rows for the rectangular pieces, because they'll be printed out for you. This report will print automatically when you click the button.
3- Finished Project	My Finished Projects form	Similar to the My Current Project Data report, this report will show you the entries you did for a finished project, along with the altered schematic if you put that scan into the My Current Project form. With it, you can quickly prepare a new project using the same garment pattern. You can either change the size of the pattern pieces to improve on the fit OR knit one for another person. You can also choose to knit a swatch of a different yarn and/or stitch pattern to make another garment of the same size and shape as the first.
4 - Graph Paper	Homepage - Get Reports	If you want a piece of graph paper for designing a special project, or for any other purpose, simply click this button and print. (Designed for US Letter Size paper.)
5 - Recipient Measurements	Recipient Measurements form & My Current Project Form	View the measurements of the recipient listed on the project you are viewing. On the Recipient Measurements form, you can print and mail or even email a copy to be filled in and returned.
6 - Schematic Report	Schematic Builder	Allows one to translate "written" pattern instructions into a schematic, in order to know if the instructions will yield a garment shaped as expected.

Patterns Entered per Book

Saturday, August 21, 2012

Book Name	Issue/Volume	How Many Entered
Blue King Shirts Kit		2
Brother Collection		2
Brother Fashions	Vol 1	9
	Vol 4	1
Brother Fashions small		
	Issue K2	5
	Issue K33	4
	Issue K11	2
	Issue K2	3
	Issue K3	2
	Issue K4	4
	Issue K5	4
	Issue K6	2
	Issue K7	1
	Issue K8	2
	Issue K9	5
Brother Machine Making Fashions		
	Issue K1	1
	Issue 5	1
	Issue 8	1
Creashie Knitting		
	Mar 2012	1
Interwoven K&S		
	Feb 2007 - CD	4
	Friday 2007 - CD	2
	Spring 2007 - CD	1
	Summer 2007 - CD	3
	Winter 2007 - CD	3
Interwoven, Best of		
	1st 20 Vols	1
W&S Style		
	Aug 2012	6
	Feb 2012	1
	Oct 2010	1

Page 1 of 3

1

My Current Project Data

Project Name: Sandy's Adriatic Mitered Card

Design: Stitches Per Unit: 4.014 Issues Per Issue: 7.805

Pattern: New Project Issues Required: 12.75

Recipient: Sandy Wiersch

Book: Sister Makers (From within source on my computer)

Issue: Cardigan

Pages: Adriatic M&S Mitered Detail Card

Machine or Brother XXXX:

Needles:

Map: 1+

Timeline:



Section Name	Stitches on Needle	Height	Rows	# of Rows
Back Panel (sleeves)	103,784	12	85,650	1
Neck/Shoulder Shaping	79,114	3	7,805	1
Front Panel (sleeves)	91,893	12	75,650	1
Front Panel (Waist)	91,893	3	21,407	2
Y-neck (triangles) (1/2 for each side)	33,120	12	25,650	1
Front Panel (Upper Chest)	31,422	12	25,650	1
Front Panel (Upper Arms)	15,159	3	15,630	2
Sleeve Center Section	34,995	18	146,250	2
Sleeve Triangles (1 per sleeve)	25,346	18	146,250	2
Waist (Waist depth)	86,486	3,3	27,117	2
Front (Waist Shaping)	13,073	15	271,173	2
Neck/Shoulder Shaping	85,270	3	7,805	1
Back Panel (Waist)	103,784	3	20,024	1
Upper Back Panel	112,514	18	16,246	1

Notes: For Adriatic's Mitered Card (M&S)
 Shoulder shaping: Dec 1, 1, 2
 Neck shaping: Dec 10 center, 3 on side 2 x
 Y-neck: Decrease 1 st every 6 rows 8 times AND 1 st every 7 rows 8 times
 Sleeve decrease: Side: decrease 1 st every 5 rows 2 times AND 1 st every 6 rows 2 times
 Half rounds for sleeve: 80-1 st on side, decrease 1 st per row on side 5 times, 1 st every 2 rows 2 times, and 1 st every 6 rows 1 time (20 rows)

Printed: 8/18/2012 1:22:57 AM

2

My Finished Project Data

New Project Name: Helens Vest #2

New Search info: Stitches: 50 Width: 6.98" Rows: 50 Height: 4"

Project Name: (Finished Schematic)

Issue's Name:

Pattern #: 16

Recipient Name: Guest Request

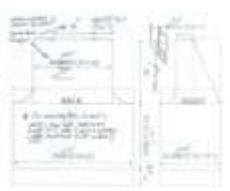
Book Name: Machine Knitting News

Issue: Apr 2012

Pages: 31

Start Date: 11 Nov 12

Final Date: 11 Oct 12

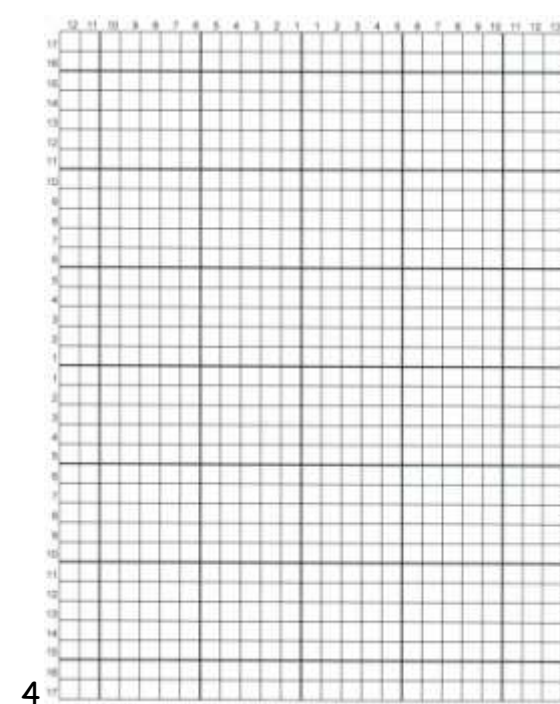


Back - Mitered	3	2000	1	
Back - Main section in progress	23	2000	1	
Back - Upper neck between arms	1/10	2000	1	
Back - Armhole decrease area	2,175	0.5	2	
Front - Mitered	3	2000	1	
Front - Main section in progress	23	2000	1	
Front - Neckline decrease area	1/10	2000	1	
Front - Armhole decrease area (L & R)	2,175	0.5	2	
Shoulder Band	40	1.6	2	
Machine Knitting	1	1/10	2	

Notes: Although the final product will utilize 1/10" of the mitered card AND 1/10" of the main section, for this initial for another one that will fit closer. I took a 1/10" shorter (initially in the article, and I had been the fit so much) and so being sure to fit snug as well.

The article was being a good first project. The Brown Sheep Cotton Green & Blue was a great yarn for a 14 year old who who does his own laundry. It's fine texture, and it holds up well, with no pilling. It will not lap the bars from other garments, but that's probably his fault (not at fault) as he's wearing the same again.

3



4

Recipient Measurements for:

Name: Gender:

Date of these Measurements:

Armhole Height, measured on a garment that fits the arm well from shoulder seam to side seam:

- 1 Neckback:
- 2 Shoulder Points:
- 3 Back, neck bone to waist:
- 4 Back, neck edge shoulder seam to hem of top:
- 5 Full Sleeve Length:
- 6 Hip at hem of top:
- 7 Hip, fullest part:
- 8 Skirt back length:

- 1 Around Head:
- 2 Across head, ear to ear:
- 3 High Bust - tape immediately under armpit:
- 4 Bust at fullest part:
- 5 Shoulder to Elbow:
- 6 Waist:
- 7 Front, neck edge shoulder seam to hem of top:
- 8 Skirt front length:

5 Sunday, October 27, 2013

Page 1 of 4

6

Schematic Report

Pattern #: 24

	12	11	10	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	10	11	12	13
17																								
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From the schematics: I scanned and printed a copy of the schematics, which I drew and wrote on. (See above right.) I went to the Homepage and clicked on "4 Work with My Current Projects." I named my project "Galen's Vest." I clicked on the "UofM Translator" tab and entered "43" into the "Inches" field, and discovered Galen's chest measurement + 1" of ease was almost 110 cm. Half of that (55 centimeters), is the second number in the size/measurement on the schematic BACK (red arrow) so I was able to use that second number to calculate the width and height in inches of other sections.

Make rectangles: Please note that I turned everything into rectangles. We all know how to knit a rectangle. Once I knew the height and width of any rectangular portion of the pattern, the Pattern Calculator would quickly tell me how many stitches and rows there were. Some simple addition, using the Calculator tab would tell me how wide a row was when it included multiple sections. Keep in mind, a sleeve is basically a rectangle with a triangle on either side, and those triangles are the same size and shape...just reversed. Also, the two triangles make up another rectangle that's been divided in two diagonally.

Tackling the Decrease: How tall was the area from the first armhole decrease to the last one? That last decrease is where the armhole ends. After that the back center section is a rectangle until you might do any shoulder & neck shaping. I read through the pattern until I came to the section about shaping the armhole. There I counted the *number of rows* involved in all those decreases, and nothing more. That height was entered into the Pattern Calculator to tell me how many rows I would need to knit using my gauge to equal the height in the pattern. Then I could plot my decreases. This can be repeated for the neck edge and any other shaping. (You can plot curves in Microsoft Paint, and it's VERY easy.)

(I built Galen's vest long before I knew about the Magic Formula. I left this information and the section on using MS Paint in the book, because the whole idea of this program is that it should give you options. Then you can decide what works for you.)

So, WHERE do I make rectangles????

This is the most common question I get. And, to be honest, I've used all three of the methods I'm about to suggest. Consider *continuing a line all the way across the pattern piece* any time you make a rectangle, as I show in the "Smallest to Largest" description. Some rectangles will be subdivided with knitting only in a portion of them (these will require shaping with increases or decreases), while others will simply be one rectangle.

Smallest to Largest: I probably use this method most, because once I've defined the small areas that need the most shaping, the rest of the rectangles become



pretty obvious. Let's look at Galen's schematic again to demonstrate this, because the rounding at the bottom of the armhole is a great place to start.

The first step is to make a rectangle all the way across the pattern that incorporates the height of the armhole shaping. You can already see on the back of the vest that everything other than the armhole area is rectangular.



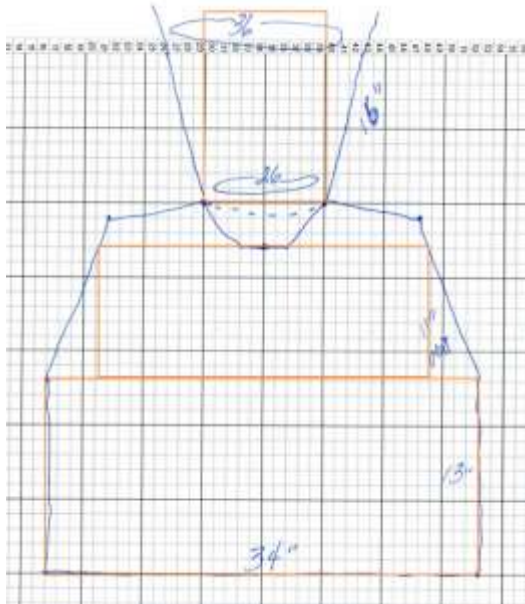
Step two is to divide the rectangles into as many pieces as are necessary to make your calculations.



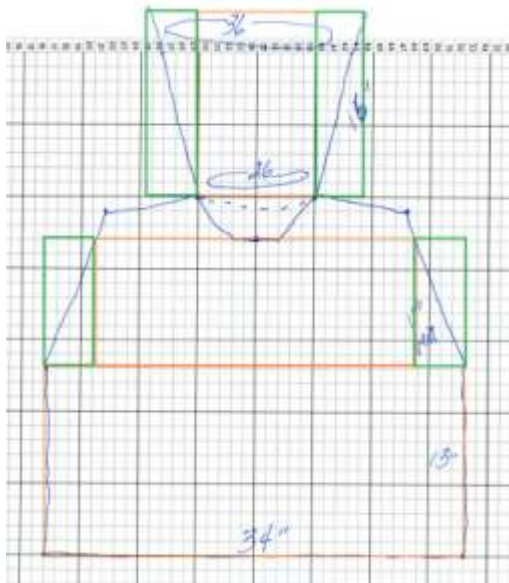
Step three is (possibly) to add a rectangle that will more clearly define the shaping of one area. Here we are making a rectangle that pulls together all the area of the "triangle" that defines the "V-neck" shaping on the front of this vest/waistcoat. I found it helpful to include the entire height and width of the triangle in my Magic Formula calculation to avoid any math anomalies.

The rest of the rectangles are now pretty easy to see.

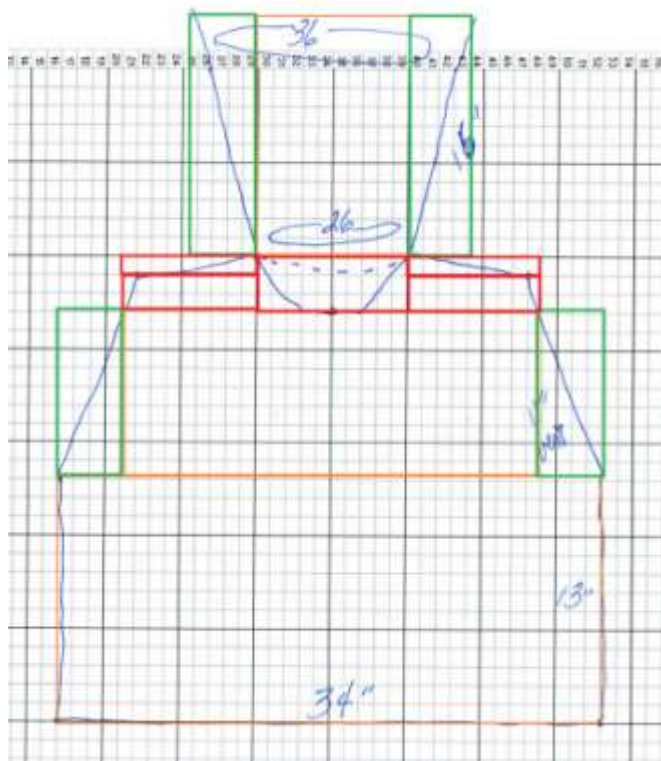
Largest to Smallest: Drena's Snuggly was a project that became necessary when our 19 year old granddaughter Andrena moved in November from Southern California, where she had lived since the age of 3, to Minnesota in order to be around more family. Of course, she picked the coldest winter in history to do this. She needed clothing that could be layered to keep her warm. For Christmas, I knit her a "prototype" of the Snuggly, taken mostly from two garments I had purchased for myself. They were very loose fitting with large cowl necks, drop shoulders, and some tuck stitch patterning that added a bit of thermal protection. The prototype was knit in some bulky yarn I'd been gifted.



My first step was to add three major rectangles to the sketch (shown in orange.)



In Step 2, I needed to extend the rectangles on the upper body and the cowl to include areas of shaping. The green rectangles extend the width of the rectangles to include the widest point in each section of the pattern piece.



The area of the garment with the most shaping is at the neckline and the shoulders. We'll add those last in red rectangles.

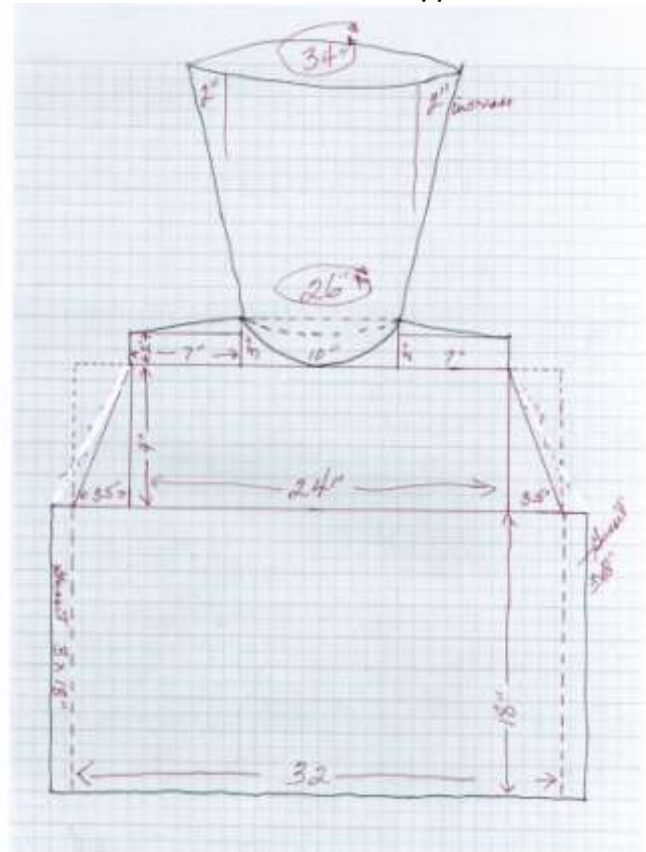
As I said earlier, this was a prototype and I learned a lot about what I really wanted to do when I did the knitting.

First, I added some sleeves to keep Andrena's arms warmer. However, these sleeves were just straight out and about 6" long. I added a buttonhole and button at the shoulder to allow them to be shorter when desired. The sleeve schematic isn't anything. We're talking about a

rectangle that's 6" by 26.32". (If you're wondering, the gusset is 3" across the top, the part of the shoulder that's straight up is 4", and we have 2 x the hypotenuse of a right angle triangle that is 3.5" x 9". The formula is $(3 + 4 + (2 \times 9.66))$. Go ahead and Google hypotenuse calculation. That's how I found it.

I knit the final Snuggly in a sport weight yarn. When I did my swatch and entered the rectangles into Knitter's Tool Chest, I realized there weren't enough needles on my standard gauge machine to knit the full width in this finer yarn. So I added a gusset under each armhole. To keep things easy, I made the top of the gusset flat and I flattened the ends of the shoulder, putting all of the triangle shaping on the armhole into one piece.

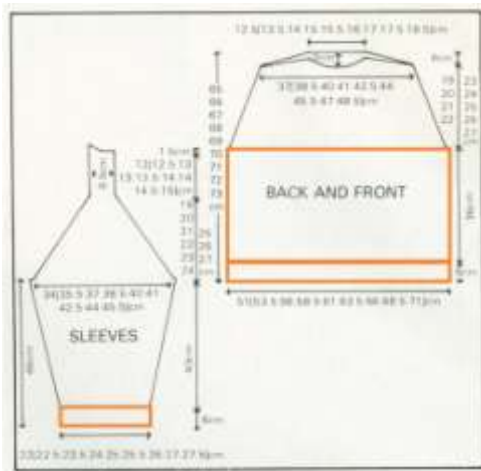
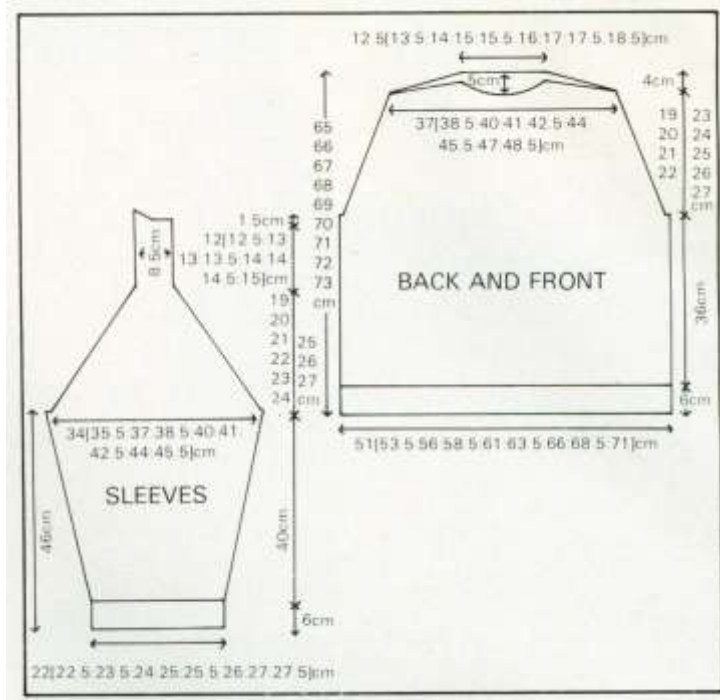
Here is my final schematic for the body of Drena's Snuggly.



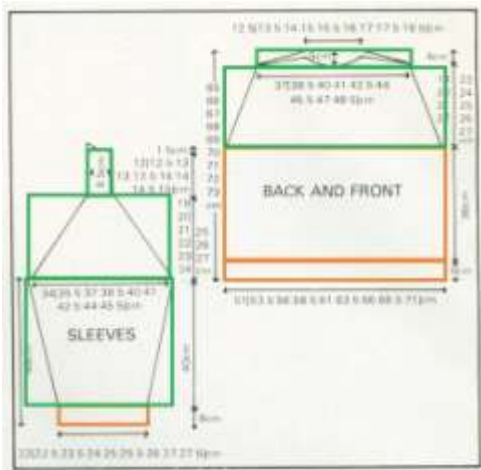
Tackling complex patterns:

The pattern I chose to make for George had multiple pieces AND they weren't all charted. I received schematics for the body and the saddle shoulder sleeve.

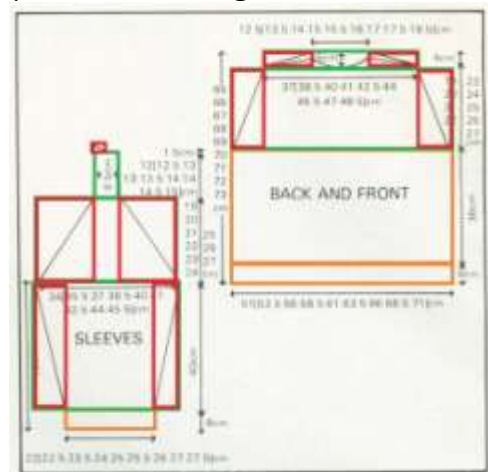
This is the original schematic.



I started adding my "rectangles" and went from easiest to hardest from my point of view. Step 1 was the orange rectangles where rectangles were most obvious to me,



Next I added green rectangles to the full width of areas that had shaping. Finally, I added the red rectangles that divided those green rectangles into shaped and rectangular sections.



Some things I needed to keep in mind on this particular pattern were that the "tab" at the top of the

sleeve is attached to both the Back & Front pieces at the shoulder seam. It fits between these two pieces, and the back side of it is longer than the front side. There are lots of implications here, but the most obvious one is that there will be a definite left & right sleeve, and that little angled tab at the end of the saddle needs to be on the left as you are

knitting one sleeve and on the right when you knit the other. This may be the reason we don't make lots of sweaters with saddle shoulders. Another interesting thing is that those tabs between the front and back pieces make the neck shaping more interesting. I'll need to be sure the "rounding" on the front of the neckline is completed in the space allowed, so this means I need to figure out ahead of time if there are enough rows (at my gauge) for completing the rounding or change the rate at which I'm binding off from the recommendation given by the Magic Formula. (REMEMBER: Any calculations you are given by the program are SUGGESTIONS. You are allowed to decide to do things differently.)

How do I find the dimensions that aren't on the schematic?: That's a good question. I'll start my explanation by stating that I ALWAYS enter the author's swatch data when I put a pattern into Knitter's Tool Chest. Here is the reason why I do that.

In the last example above, no dimensions were included for the collar. I used the Pattern Finder (in the center section of the Homepage) to look up Man's Sweater and quickly locate the Book, Issue, and Page # for the pattern. It took me about a minute to open the book to the correct pattern. In the written pattern, the author told me to cast on X number of stitches to make the polo/turtle neck collar. I had noted the Pattern # and the author's UofM type (centimeters), moved to the Homepage, selected the Schematic Builder, entered the Pattern #, entered that I use Inches as my UofM, entered the number of stitches the author had said to cast on for the collar and the number of rows they told me to knit, and as soon as I pressed the TAB key, I knew how many inches wide and how tall the collar was supposed to be. Now I could go back to My Project, and enter the rectangle for the collar.

Hierarchies (Another way of thinking about "Books")

If you have ever been to the library, you have worked with hierarchies. Your library has sections of Fiction, Non-Fiction, Reference, Children's, and sometimes Movies. There are collections within each of these sections. Often the books are grouped by author or subject.

I suggest that you gather your knitting patterns into groupings as your library does. You don't have to make collections of everything. Some books will just be one book and you'll use the title in the Book field.

You may have collections that aren't magazines. So, how will you decide what to call these? I like the simpler is better school of thought.

Books

Years ago I took magazines apart and put the patterns from them into file folders. I keep these in one file drawer. The drawer is now a BOOK called "File Folders." Similarly, I have a group of 3-ring binders with plastic sleeves containing articles and patterns. All binders together are a BOOK cleverly named "Ring Binders." Recently I bought several pattern collections on CD. They are all stored on a shelf together and that Book is called "CD's & DVD's."



Sometimes we will collect all of the pattern books or technique books by one author. I have just such a collection by Kathleen Kinder, and my Book is named "Kinder" I have another collection by Lily Chin, called "Chin." I'm sure you are completely underwhelmed by my cleverness.

By now you probably have a good idea of what I call a book, so how do you find this lacey pattern that you saw a year ago, but you want to knit now? Well that's where the rest of the hierarchy comes in. After all, even if I remembered it was in an Interweave publication, I might have 10 or 20 magazines to search.

Issue/Date

Using the problem of relocating the Interweave pattern, we'll continue our hierarchy with the next level. Interweave publishes its magazines 4 times per year, so I normally enter something like "Fall 2007" into this field. However, I found that lovely blue, lacy camisole/top/tank (we call these by many names) in a special edition called "The Best of Interweave knits - Our Favorite Designs from the First Ten Years." It's "Book" is still simply "Interweave", but it's Issue/Date is "Best of 1st 10 Yrs."

The photo below shows three machine knitting pattern magazines published by Brother. Each of the magazines is Issue 1 or Volume 1. When entering the patterns

from one of these magazines, my decision was to make them all part of a BOOK that I call "Brother." To differentiate between the magazines, I used the "Issue/Date" field as follows:

MK Fashion Issue 1

Small Fashion Issue 1

Lg. Fashion Vol. 1



When entering lots of patterns from one magazine, I'll copy the Issue/Date field after I type it the first time and paste it into each record, rather than re-type it each time.

Moving from the easy Issue/Date (many magazines are simply dated with the month and year) entries of magazines and collections to something less traditional, let's talk about my Books named "File Folders", "Ring Binders", and "CD's & DVD's". What do I call them to differentiate? Well, in my case, I named my file folders according to the magazine from which I had taken the pattern. The Book is "File Folders" and the singular folder may be "Vogue", or "Interweave." If I had saved the folders by "Women's", "Men's", "Unisex", "Boy's", etc. that would work fine, too. I became even more creative with my 3-ring binders. They are "Blue Binder #1", White Binder #1, and White Binder #2, etc. I even have some 3.5" floppy disks

with stitch patterns stored on them. But, I have a name on each label that can become their "Issue."

Page

After you have entered the Book and the Issue/Date, you are taken to the "Page" field.

The easiest entry here comes from those books and magazines where you actually have page numbers. However, some publications only number the patterns in them. In those cases, I enter the pattern number into the Page field, and I'll enter the "page" as "#12" to remind myself that this is the pattern's number.

Finally, we come to those File Folders, Ring Binders, and floppy disks. I write a number on each pattern or article in my file folders and ring binders, so those become my page numbers. Floppy Disks have Track numbers for each item stored on them, so that's what I enter here.

Once again, I wish to stress that all of these are SUGGESTIONS. You don't have to organize things the way I do, but many of the people helping me put this information together asked me to explain how I did things, so they could decide how they wished to organize their Books, Issues, and Pages.

Categories and Subcategories

I need to apologize to you, because Categories and Subcategories have some limitations. There will only be Categories and Subcategories. You will need to decide which is which, and you will only get two sorts, one for each.

I decided for myself that I wanted to have Lady's, Men's, Adults (unisex), Boy's, Girl's, Child's, Baby's, Techniques, Stitch Patterns, Pet's and a few others as my primary categories.

I decided that, for me, types of garments worn by people and pets would be SUB-categories of the wearers, and types of techniques and stitch patterns would be SUB-categories for them.

I didn't want to go the other way and have garments as the categories with wearers as the subcategory, because I might become confused about whether a Lady's Fair Isle Sweater with a spectacular Cowl neckline (therefore in the Sweater category) should have as its subcategory, lady's, fair isle, or necklines. This is my suggestion. You get to decide what your hierarchy is.

My Subcategories include things like:

Sweaters - my term for a long-sleeved top without a buttoned opening
Tops - short sleeved top without a buttoned opening
Vests - sleeveless top to be worn over another garment
Cardigans/Boleros/Shrugs - long or short sleeved garment with an open or button front to be worn over another garment
Jackets/Outerwear - Heavier open front garments to be worn over other clothing
Seaming
Necklines
Knitting Tools
Machine Maintenance
Fair Isle
Cables
Tuck/Brioche
Bobbles & Nuups

I'm sure by now, you get the idea, and that many of you are laughing because you call those garments by entirely different names. That's good, because you get to write your list of subcategories and call them by names you use. (By the way, the clarifying definitions are just here to help you understand what I'm describing. I didn't put them into the fields of the program.) Each of these garments can be worn by any of the humans in the Categories, along with many other garments.

Of course, some of the things on my list aren't garments, but techniques or stitch patterns. I save articles that show me how to make better garments or to do certain stitches more successfully. I'm sure you've come across articles in magazines that you thought you'd like to read when the time came that you needed that skill. Now you can find them when you need them.

Computer Tips for Users

Adding a "folder" and/or a sub-folder

Find the icon for Windows Explorer. It will be along the bottom of your computer screen and





will look rather like this. Click this to open the Windows Explorer window. It will look rather like this.

Along the left edge you will find a list of options. If you have Windows 7 these will include Favorites, Libraries,

Using your keyboard to navigate and enter

Learn to love the TAB key on your computer keyboard. The easiest way to fill in forms quickly is to type your entry, or click on the ▼ at the right end of a drop down list field, click on your selection and press TAB to save that information AND move to the next field/cell.

Keyboard shortcuts that come in handy

The keyboard shortcuts aren't necessarily for Knitter's Tool Chest. You can use these anytime you are typing on your computer. All of them use the Control (Ctrl) key at the same time as another key. **Press and hold Ctrl, and then press the other key.** These commands are all toggles. (Do the Ctrl command once to get into the mode and again to cancel it.)

Cut, Copy, and Paste

Ctrl - x = Cut

Ctrl - c = Copy

Ctrl - v = Paste (These letters are next to one another and near the Ctrl key. I often teach computer students to think that X looks like scissors and cuts, C for copy is very logical, and V points down and pastes down.)

Find

Ctrl-f Hold down the CTRL key and while doing this, press the letter "f." This will open a "Find & Replace" window. Type a "Key" word into the space next to "Find What" and then press the "Find Next" button to be taken directly to the next place in the book where that word appears.

Bold, Italic, and Underline

Ctrl - b = Bold

Ctrl - i = Italicize

Ctrl - u = Underline

Scanning, Saving & Using Photos

A quick word of advice. **SAVE ONLY ONE PHOTO INTO AN IMAGE FIELD.** It is *possible* to store multiple photos, but it is known to cause problems.

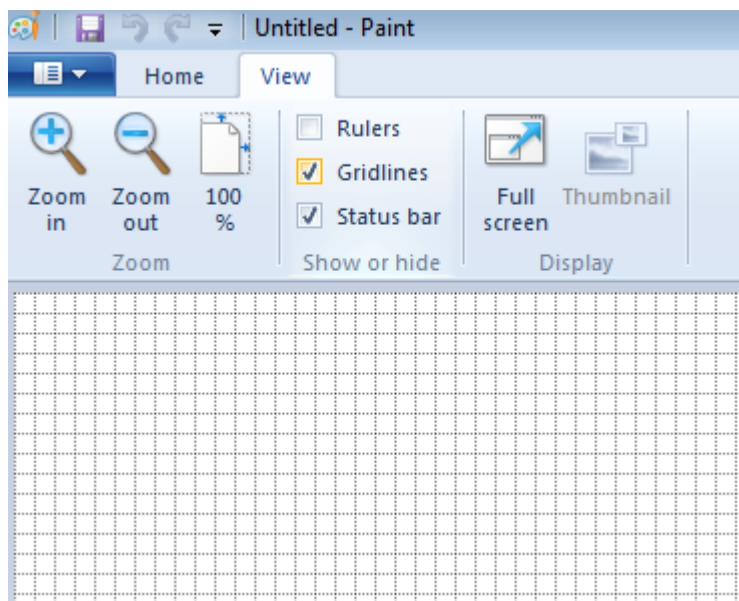
If working with a photo in a magazine or book, scan the photo, right click on the image, and select "Open with" and your photo management program. (If you've never scanned a document before, but you have a printer/copier/scanner, grab the manual that came with your scanning device. I can't tell you the details of its operation. It probably has software installed on your computer to help with this, so you may wish to know where it saves the files.)

In your photo management program, "crop" the image (draw a box around the part you want to display and discard the rest) and use the program's "File/Save As" menu to store the image in your Image folders. I strongly suggest saving the photo as a low res .jpg. Save it as small as you would save to use on a website. Knitter's Tool Chest has a total file size limit of 2 Gigabytes. It will hold several hundreds of images, but there are limits.

If you have a digital camera, use the directions for taking photos of yarns and projects. Then save a copy in low res (as you would to put a photo on the internet), and put that copy into your Image files.

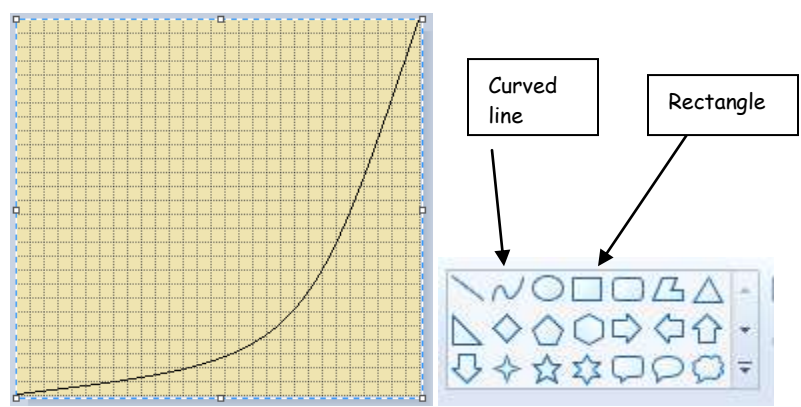
To add a photo or scan to your Pattern Entry, Yarn Entry, or Project page, double click into the Image field. When the Attachments window opens, click on the "Add..." button, browse to your Image files and to the image you wish to add. Select the image by double clicking on it. Then press OK to accept the image. If you realize you chose the wrong image, open the Attachments window again, highlight the image name and press Remove and OK. Open again, browse to the correct image and select it. PLEASE ONLY ADD ONE PHOTO TO ANY IMAGE FIELD>

Using MS Paint to Calculate Increases and Decreases



Microsoft Paint is a very simple graphics program that comes with every copy of Windows. To find Paint, click on your Start button. When the menu opens, hover your mouse over "All Programs", and when the list of programs opens, click on Accessories to open its list of programs. One of those Accessories will be Paint. Click on Paint to open it.

Near the top left corner, there will be two tabs (Home and View). Click on "View" and the ribbon will change. Click in front of the word "Gridlines" and voila!!! You have a grid.



Once you see gridlines, click back onto the Home tab; use the "Select" tool to define the number of squares that represent the stitches and rows in a pattern section with decreases. (We'll go back to Galen's Vest. That armhole area was 29 stitches wide by 27 stitches high. You can tell how many squares are in your selection by glancing at the bottom of the screen. The squares are 10 x 10 pixels, so 29 x 27 is 290 pixels high by 270 wide.) After you've selected the correct number of squares, click on "Crop" to limit what you see to exactly that number of squares. "Fill" the grid with a pastel color. Then build a curved line to represent the shaping you want to obtain and count how many squares happen before the curve crosses into another row. These are your decreases on that row.

The grid is square, so it won't show you exactly how the piece will look. Knitting stitches are usually wider than they are tall. However, it's quick and flexible. You can change the curve by moving your cursor while pulling the middle of the line into the curve you like..

This is YOUR pattern, so you can change the shaping if you wish.

I sincerely hope you enjoy using Knitter's Tool Chest and creating garments and projects while using it.

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