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How to resize quilt blocks: easy (promise!) quilt math

Posted by Robin on June 8, 2012, in quilting & sewing, quilting tutorials

I've always had trouble with numbers. I stand in awe of those of you who can manipulate them with skill and finesse. I break into a sweat if I need to figure out what numbers to punch into the copy machine in order to enlarge a 12" appliqué pattern into 15". Are you with me here? Do you have a math phobia too? If you don't and number among the math adept, please feel free to smirk and feel superior. I envy you.

Quilting has a way of sneaking past phobias. Thanks to a friend, I was actually able to learn how to change the size of quilt-block patterns and before I knew it, I was competently working with proportions and percentages of all types! The hardest part was getting past my belief that I couldn't do quilt math because it involved numbers. Here's how it works. All you need is an inexpensive calculator, a little bit of courage, and the phrase:

"Ya start with whatcha want, and ya divide it by whatcha got."

Imagine a darling little appliqué that's just perfect for your wall, but the 12" block is too large. You decide you'd like to make it 10" square. You take the 12" pattern to a photocopier with the intent to make it smaller, but what percentage should you make it? In the words of my friend, *"Ya start with whatcha want, and ya divide it by whatcha got."*

Begin with your goal—it's the reason you have to deal with quilt math in the first place. What you want is a 10" block, so punch "10" into your calculator first. Hit the division key, then enter the number "ya got," which is 12. Press the "=" key. The number 0.83333333333 pops up.

The copy machine wants a percentage, so move that pesky decimal point to the right by two spots, and then you're done. Because this is a quilt, not a suspension bridge, you don't need all of the decimal points, so ignore them. You need to reduce the 12" pattern to 83.3% to make a 10" block. Yes, it's that easy to figure out.

Original block   Block sized 83.3%
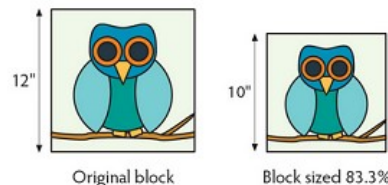
Let's work it the other way and make it a little more complex. You have an appliqué pattern for a 6" x 7 1/2" heart, and you decide you'd like to make it at least 8" wide, but you're clueless how tall that will be. Ask yourself, what is it you want? An 8"-wide block. What do you have? A 6"-wide block. 8 ÷ 6 = 1.3333. This is what I call the "proportion

number." Move the decimal point two places to the right, and you've successfully determined you need to enlarge the heart pattern 133.3%. How tall will it be? In this case you *multiply* the original height (7 1/2") by the proportion number, which is 1.3333. So, 7.5 x 1.333 = 9.99975. The heart will be about 10" tall.
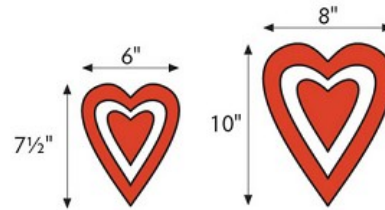
One way to check that you did the math correctly is to remember the following. The proportion number will always be greater than 1.000 if you're enlarging something, and will always be less than 0.999 if you want to make something smaller. Always. If you want to reduce a pattern but you have a proportion number larger than 1.000, you likely entered the wrong number into the calculator first. I do it all the time.

Remember, *"Ya start with whatcha want."*

When changing the sizes of blocks, always do the proportion calculations with the numbers for *finished* sizes, not *cut* sizes. This is because you use different numbers to add seam allowances to a triangle (7/8" for half-square triangles or 1.25" for quarter-square triangles) than you add do for the seam allowances of a square or rectangle (1/2"). Do all the proportion calculations for the finished pieces first, and then add the seam allowances.

I hope you were able to face all this number stuff without getting a headache, though I'm certain those of you who find math easy are rolling your eyes by now. Did you find this information helpful? Would you like more posts on quilter's math, or would you like to read about something else? Let me know in the comments. And remember, to keep quilts in proportion, *start with what you want, and divide it by what you've got.*

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149 Comments (leave a comment)

Very helpful information! I love easy math or tricky math made simple. I am in quilting because I enjoyed geometry so much in school. The fact that I did so poorly in Algebra has not held me back but I might have a few more quilts done by now if I had had "the math knack"

—*Michelle Harrison* on June 8, 2012

Just got some great ideas and tips. First time here, but liking it alot.

—*Judi Cabanaw* on June 8, 2012

I can do this! Thanks.

—*Judy Maggio* on June 8, 2012

I am a fairly new quilter and I really loved this tutorial. It has made something I thought difficult to be very easy. Please do more.

—*Madeline Watson* on June 8, 2012

You make it sound so simple out of something that has baffled me.
Thanks for clearing this up.

—*Pat Moseman on June 8, 2012*

I would LOVE to have more math information. In particular, I would really appreciate knowing how you take a pattern for a quilt that is large and make it smaller. I can't quilt something that is queen size but so many patterns are in queen size or larger. How do you make the adjustments???????

—*Claire Desrochers on June 8, 2012*

Brilliant!

—*Kari on June 8, 2012*

Is there a place I could go to to copy this information without having to write it all down by hand? Your method was very helpful. Thanks, Daisy

—*Daisy Christopherson on June 8, 2012*

Daisy, if you have a printer you can print the blog post. Or you could copy the post and paste it into a document. Hope that helps!

—*Tina on June 8, 2012*

Great tip! Thanks for the easy solution!

—*Sandra Thiesen on June 8, 2012*

Now this was wonderful! I'm going to print it out and keep in my "book of notes" for future use as I do like to change sizes...but didn't know how to do that. Thank You!

—*Jane Knoll-Tenney on June 8, 2012*

"Ya start with whatcha want..." is very beneficial and I printed it to keep with my quilting reference books. I learned something new today–thanks sew much!

—*Tam on June 8, 2012*

This is absolutely brilliant! Thank you for sharing.

—*Alberta on June 8, 2012*

Thank you for usable, understandable information! I am among the math inept group... this was clear, concise, and simple. I can do this! Please do more.

—*Pat K on June 8, 2012*

That made so much sense. I think I can remember "you start with what you've got."

—*LeAnne L on June 8, 2012*

I'm with you on the math part. Luckily, my husband was a math teacher so I go to him with all that stuff and he figures it out "right quick" for me.

However, I'm going to make a note of what you said above because sometime he may not be around when I want to get something done "right now"!

—*Marvelyn Adams on June 8, 2012*

I love this math tutorial. Everything that helps to make quilting easier is great! You presented the information in a very easy to follow manner. Thank you.

—*Lynn on June 8, 2012*

THAT is wonderful information ... I am copying it and spreading the good word .. along with a link to here – really appreciate your aking that time to share this.

—*Sandie McFerran on June 8, 2012*

Thank you so much for this easy method to get what I want.
I do alot in my head and come out quite close but sometimes
it takes a few trial and errors, now I will not have to waste
my time and get right down to quilting. thanks again
I love your post!

—Geri on June 8, 2012

I, for one, would love to see more articles like this. I especially liked the fact that you
focused on one concept, explained it in an easy to understand fashion, then gave simple
examples for practical application.

—Stephanie on June 8, 2012

"You need to reduce the 12" pattern by 83.3% to make a 10" block."

Did you mean to use ' to' instead of 'by' in that sentence?

If a block is reduced 'by' 50 % it finishes at a quarter of its original size so 80+% would
be an even smaller block.

Sorry to be pernickety, but I used to teach this sort of thing....

—Gloria B on June 8, 2012

Please do be persnickety, Gloria! That was my copyediting goof, and I appreciate your
comment. The post has been corrected.

—Tina on June 8, 2012

That was incredibly helpful. I am going to print it out and keep a couple and give some to
friends.
Thank you very much!

—Denise Cabral on June 8, 2012

Great information presented in an easy to remember way. Look forward to more of the
same. Thanks

—Gina Burgess on June 8, 2012

Good Job. As a former math teacher, it was nice to see an easy way for others to
understand. A friend of mine who is a math teacher posted it. Well explained for math-
phobic people.

—Kathy Elliott on June 8, 2012

Excellent post! Although numbers and math don't intimidate me, this post explained the
process to enlarge and decrease a pattern very clearly. I would definitely like to read more
posts like this.

—Signe on June 8, 2012

Thank you very much for this article. Frequently I would like to make something a
different size than the original pattern. Your article makes it more enjoyable – and easier –
to do.

—Marie on June 8, 2012

Thank you so much for making a very difficult task so easy. I am going to share your tip
with my mini-group and other quitting buddies.

—Victoria W on June 8, 2012

I am a math person & I still found this helpful. What a good way to tell my friends,
because what I was saying wasn't helpful. Yes, please more math. Thank you!

—Sharon on June 8, 2012

I like this kind of information. I can remember that phrase, so it will help me. Yes, more
posts like this. Thanks.

—*Joanna* on June 8, 2012

Thank you for this math lesson. It is going to be so handy to keep nearby.

—*Donna Hendricks on June 8, 2012*

This helps a lot. I loved the humor in it as well as the information.

—*Patty M on June 8, 2012*

Thank you. Your article helped out a lot. It is rather funny to think something so easy always sounds so difficult.

—*Margie on June 8, 2012*

Brilliant…i can't tell you how many times i struggle with this..you are my aha moment ..thank you tons

—*mdm samm* on June 8, 2012

This was a wonderful teaching lesson. Thanks for making it so simple.

—*Rae on June 8, 2012*

Great tutorial…will come in very handy! Thanks so much and, yes, please do more!!!

—*Terry* on June 8, 2012

I love the math lesson and would love to share it with my guild.

—*Charlene S* on June 8, 2012

Thanks for a great article! You sparked some fun ideas! And I'm terrible with math, so this is a huge help.

—*Lisa Mayfield* on June 8, 2012

Thanks for the math – you made it easy!! I would like to hear more quilting math.

—*Ruth B on June 8, 2012*

The link seems to bring you to this post for the scrape- book. The math does bring problems when you want to make quilt patterns for different size block. Thanks for the info on how to resize.

—*Linda C on June 8, 2012*

I'm usually not afraid of math calculations but this makes it SO easy and fast. Thank you for making it so straight forward.

—*Liz Dicrescenzo on June 8, 2012*

I'm good with math, but not without a formula. I always confuse myself whenever I try to figure out how to re-figure the size of something.
Thank you for providing a nice catch phrase for remembering the formula!

"Ya start with whatcha want, and ya divide it by whatcha got."

Ya gotta love it!

Please keep these types of posts coming. Too many people "assume" that quilters come with the prepackaged knowledge.

Please! When I first started quilting I had to research what "quilt in the ditch" meant because I was too embarrassed to ask. Everyone acted like it was common knowledge!

—*Crazy Cuban on June 8, 2012*

Thank you. So helpful

—*Naomi on June 8, 2012*

Robin, this article is priceless! Printing and saving it today. More please.

—Joan, Australia on June 8, 2012

Very helpful. I'm printing it to put in my tips and patterns notebook for future reference! Thank you!

—Jan Maybee on June 8, 2012

This is the best blog post I've read in a long time. I'm printing this out for my sewing room. Thanks!

—Ginger on June 8, 2012

Great article. You're phrase is catchy, which makes it easy to remember for those that have difficulty in how to resize something. I think you should post more articles like this. I'm a math whiz, but I always try to find ways to simplify math for those that struggle with math. This is a good one!

—Lynnita on June 8, 2012

The proportional maths tutorial is the most succinct I've read. I love maths and geometry, but I would have taken twice the number of words to explain what you did – and believe me, some friends have had to put up with that. I would love to see more lessons of that caliber. I will point some friends in your directions, I'm sure they'll get more quilts done. Many Thanks.

—Cherie Hoyle on June 8, 2012

Thanks for the simple explanation. Imagine if they taught math in school by way of crafts. Maybe more girls would go into STEM careers because they'd get over their fear of math.

—Jusa on June 8, 2012

Hi Robin, this is my second attempt to submit my comment. Such easy to understand grass roots instructions, I'm printing them today! More please.

—Joan, Australia on June 8, 2012

Finally an explanation I can understand! Your simplified way of re-sizing block was very helpful.
I would love more of these helpful posts.
I would enjoy any topic.

—Marjorie on June 8, 2012

Thank you for writing this article. Math and I are not good buddies. I have printed this simple to understand method and will use it with pride. Keep writing about quilting math for the mathematically challenged like me!

—Onita Oles on June 8, 2012

This is absolutely outstanding. I happen to good with figuring stuff out but this is an amazing trick. I'm sure I will be using it often and YES I would like more "Stitch This" things like this one! Great job!

—Helen Cheney on June 8, 2012

I did enjoy this article and you made it very easy to understand. Yes, I'd like more math! I'd like more explicit details when changing a pieced block and figuring out exactly what size to cut, etc.

—LJ on June 9, 2012

That was really a great way of teaching that simple method! Yes Yes Yes, more Quilt math would be super! Thanks so much!

—Duane Wiley on June 9, 2012

Excelente la informacion,de mucha utilidad,Dios bendiga a todos los que generosamente comparten ,muchisimas gracias !!!

—marita on June 9, 2012

Hi Marita, we've translated your comment to read: "Excellent information, very helpful, God bless all those who generously share, many thanks!" Thank your for your comment!

—Jenny on June 11, 2012

I love this column. I will use this info for sure. I also have a problem regarding changing the block size to what I want but not being able to change the sashing to the appropriate proportion. I remember Jinny Beyer using some sort of formula that said: "this is to this as that is to that" but I can't for the life of me remember how you did it.
Do you have an easy solution for that one? Thanks.

—Kathleen King on June 9, 2012

This type of information is really helpful...even if you can do the..this doesn't tax my brain as much. I for one would like to see more of this type of information. Thanks so much!

—Cindy on June 9, 2012

These are some great ideas! I look forward to discovering more ideas along the way. Thanks!

—Donna on June 9, 2012

This type of information is really helpful...even if you can do the math...this doesn't tax my brain as much. I for one would like to see more of this type of information. Thanks so much!

—Cindy on June 9, 2012

Please, more posts on quilter's math. They are very helpful; and the older I get, the more help I need!

—Elizabeth P. on June 9, 2012

I really appreciate the math lesson. Could you address the topic of borders and how to keep them proportional to the size of the blocks in the quilt or to the pieced unit?

—Shirley on June 9, 2012

I really appreciated this information. I have a project that has been waiting for me to figure out the size of the fill in blocks for some pre-made squares. Thank you so much!

—Patty Moffitt on June 9, 2012

Obrigada, ajudou muito

—Maria Nogueira on June 10, 2012

Hi Maria, we've translated your comment to read: "Thanks, helped a lot." Thank you for your comment!

—Jenny on June 11, 2012

Genius!! I can figure this out now too!!! Can't way to "show off" with this information!! I will be pinning this on my Quilt and Sew board on Pinterest for future reference!! Thanks!

—Michele T on June 10, 2012

Thanks for your quilt math post. I would be able to figure it out by myself, but only after sitting and scratching my head, and pulling out pencil and paper and trying to remember my high school algebra. You really made it straightforward!

—Barb Johnson on June 10, 2012

Love the math....part of why I like quilting so much...a perfect combination of creativity and numbers. You've made it very practical and memorable. Thank you!!

If you press the % (percent) key instead of the = (equal) key on the calculator, you will get the percent for the copier, without having to move any decimal points.

I too am math challenged, but found this easy to understand. I like to do miniature and small wall hangings so this will make it easy to shrink a pattern. I'm going to print it out and keep it handy. I'm the newsletter editor for my quilt guild. Can I have permission to put your article in our newsletter? We have all level of quilters in our guild and am sure they would love this tip. Thank you!!

more quilter's math…..please. Thank you – you are kind. Any info pertaining to quilting is appreciated. Taking the mystery out of color selection would be great too.

Thanks so much for taking the time to simplify a haunting task. I can do this and I will print this info. to place in my notebook of treasured quilt tutorials.

Love the "start with" math thingy! Awesome. And, thanks!

I will be sure to share this with new quilters I meet as it is so memorable. Thank you, and yes, more math tutorials are always welcome, as are other tutorials.

Thank you so much for making it simple! I too was mathematically challenged – esp in Trigonometry but this actually makes sense! I laughed out loud when I read the "Suspension Bridge – NOT" comment. That keeps things in perspective, somehow and doesn't interfere one bit with my quilting enjoyment. I am a competent beginner and just beginning to try my own ways of doing things so I love this kind of challenge – using the old traditional blocks and resizing and reworking them.

Thanks for the info, very helpful.

Great lesson- and i Loved your way with words!

Thank you. Your tip is simple and very helpful.

Kathleen and Shirley (and others)
Once you figure out your "proportion number" you can use it to calculate the new sizes for borders and sashing. If you size a 10" block to 12" the proportion number is 1.2" (12" divided by 10" = 1.2). Multiply any of the pattern's finished measurements by 1.2 and you will know the finished measurement for your realized piece. For example, if the quilt originally had 4" borders, multiply 4" x 1.2 = 4.8". I'd make it easy on myself and plan on 4 3/4" finished borders. This works for making quilts smaller too. Size a 12" block to 9" and the proportion number is 0.75 (9" divided by 12" = 0.75). Multiply any of the original finished pieces by 0.75 and you will have the proportion for the smaller quilt. An original 1.5" sashing would be 1.13", or close to 1 1/8". Thanks!

I just opened a small quilt shop and I am always trying to find info for my customers to make things easy. One of my customers sent me to your link and am I happy.. You made it so easy! I also struggle with math and finding quick answers for customers. This tip is so great I will be passing it on to so many that will be just thrilled. Please continue with all the math help you can. Thanks soooo much. Sharyn and many of my customers

—*Sharyn Meredith on June 13, 2012*

This was so helpful!! ....and written so even I could understand it!! I would LOVE to see more quilting math!! Math is NOT something that I do well!

—*Lynn on June 13, 2012*

Thank you for this much needed information. I've printed it so I can share it with my Bee. I am so bad at numbers I couldn't begin to explain sll that you've taught us here. If I infringed on a copyright let me know. I will not sell my printed copy.

—*Donna on June 13, 2012*

Thank you so munch! I love the lesson and very helpful for a project I wanted to enlarge.

—*Sonia Webers on June 13, 2012*

Thank you so much for this information! I will be printing three copies – one for the bulletin board in my sewing room, the second for the bulletin board in my classroom (I teach junior high English but sometimes help my students in other subjects), and the third to pass on to the math teachers at school. Your explanation "Ya start with want ya want" makes it so easy.

—*Anne Johnson on June 13, 2012*

Great information. My quilting friends think I am a math whiz but you make it so much easier.

—*Denise C on June 15, 2012*

I enjoyed the help with math to enlarge or reduce a pattern. I was good in math during school, but that was a lonnnnnnnngggggggg time ago. 😊 thanks so much.

—*Susan A on June 15, 2012*

Oh my! You made that so easy! Thank you from the bottom of my heart. Really! Just wonderful. So happy I found Stitch This! I read every single one that pops in my inbox. THANK YOU

—*Polly Hada on June 15, 2012*

This info is so helpful...and will save my husband lots of grief. Thanks so much. Would love more math tutorials.

—*Kathie on June 16, 2012*

Thank you. This will be saved in my helpful hints file. The way in which it was presented was very easy to understand. Please continue with the quilt math lessons.

—*Cheryl Kochick on June 17, 2012*

Excellent information. Even as a bookkeeper I find math perplexing and hard to remember. Now I have this in my file for quick reference. Thanks!!

—*Sue Desrochers on July 14, 2012*

Thank you for the wonderful sizing of a pattern info. Explained enough that my non mathmatical brain got it!

—*Jewell on July 16, 2012*

Thank you for the information. The way that you have put it seems easier to remember. I have put the information down so I do not loose it!! Thank you once again!

Great info, was looking for this as I need to make a 10" block into a 12" block. Thank You!

Thank you for this I had always struggled with how to resize applique patterns.

If they had tried to teach me math by teaching me quilting, I wouldn't have grown up thinking I was math challenged! I enjoyed this article and would like to read more. I have found that math concepts that eluded me all my life have become clear to me when thinking them through while making a quilt. Who knew?

Thank you...how can I forget ..."start with what you got"...then "what you want". PERFECT..DD

Still sounds 'Greek' to me...but I will try this

Thank you! Helped a lot!

I really appreciated this article. I always struggle with the math in quilting. Thank you. Any other math type advice would be helpful.

I should know this but need reassurance-we are to submit a square 8 1/2"
to a group-that is to include s.a.—now for your book I follow an 8" pattern correct? As that is my "finished" square?

I just used this to resize a 12" block pattern to 8". Now it will fit into my design. With your advice and my copier, no block can now escape me!!! Bwaaa hahahahah 😊 Thanks again, terrific when math is made simple.

Thank you so much. Even though math is not that difficult for me, this is really helpful.

I have a pattern that is just 2 pieces. They are the same size and sewn togheter. I am now to cut them into 10" blocks but my square ruler is sized to cut 101/2. Could I just use the 10 1/2 size to cut my blocks and know that the quilt will finish a little larger?

Hi Marie,
It's hard to say for sure, but it sounds pretty simple-I don't see why it wouldn't work out just fine. The good news is, since you're cutting them larger and you find it's not working out you can always go back and cut them smaller!
Thanks for your comment,
Cornelia/Customer Service

Finally someone who explains the process simply. Thank you.

Thank you so so much, from a math challenge person!

—Sara on March 15, 2015

As someone once famously said: "It's not rocket science, it's math." (Our current President, in case you did not get the cultural reference.) That's all, folks! All quilters, nay all citizens, are capable of doing math. The teaching of math, particularly to female students, is what has been the problem. Not the math itself. Math is just organizational thinking, like what you do every day in your everyday family matters. The teaching of math to the baby boomer generation was the weak link.

—Carolyn on June 14, 2015

Ok we need to enlarge a traditional blocks to 36 inches each for a play called The Quilters. Explain how.

—Bonne on June 18, 2015

I'm rather new to quilting and have often wondered how to resize my patterns. Thank you for this great lesson.

—Ann on June 25, 2015

Ohhh my gracious!!! I hate MATH, I dread anything that involves numbers! I will have my son or husband figure something mathmatical out because I dont understand it. But the way you explained this made me get my calculator out and try it! I did it ! Wow! Thank you so much for this! I also had to resize a ladybug that is going on grandbabys shirt, it was the easiest thing to do! My copier wont hate me anymore. Thank thou Sooo much!

—Trina Fox on July 22, 2015

That's brilliant, I usually spend ages working on trial and error until I get it right. Thank you so much, will save me a lot of time

—Sandra Hunter on September 23, 2015

So cleaver! Thank you for making my life easier!

—Connie Hatch on September 28, 2015

First time here. I have read 3 articles and I am getting all kinds if ideas. Love the quilter's math. Can't wait to read and learn more.

So happy you found us, Terry, welcome! –Jenny

—Terry on May 6, 2016

I am loving the time you took to help the rest of us figure out how to get quilt math done way easier without all the frustration. Some of us end up not making some quilts due to the fact that the math gets us. Thank you

—Donyna Johnson on June 11, 2016

Brilliant. No more trial and error and endless pieces of paper. I am definitely going to put this in my 'resource' book. Thank you so much. Happy (happier) stitching!!!

—Nanna Ray on June 19, 2016

OMG. This was priceless, I would love to learn any other little math tricks you may have up your creative sleeve. Thank you so much.

—Susan Smith on June 20, 2016

Wow, that makes it easy. Thank You.

—Linda Baker on June 23, 2016

I HAVE NOT TRIED IT YET, BUT HAD TO SAY THANK YOU RIGHT AWAY. i WAS JUST SO HAPPY TO READ THAT I HAVE TRIED SO MANY TIMES TO ENLARGE OR DECREASE THAT I JUST GAVE UP. AGAIN THANK YOU SO MUCH FOR SHARING YOUR KNOWLEDGE WITH ALL OF US. YOU HAVE MADE MY DAY

JUDY

—Judy Maddocks on June 25, 2016

WHAT? How could this be so easy?? But it is. Thank you. Thank you.

—Linda Card on June 30, 2016

I loved how you explained how to resize quilt blocks. I too am math challenged so now I totally understand how to resize a block. I am hoping you can explain to me how to resize an entire quilt that does not use blocks. I am making my first bargello quilt. Finished size is 59" x 59". I want to make one about half that size that I can hang on my living room wall. I cannot figure out how to size this smaller without ruining the pattern. I am hoping that you can help me with this.

Hi Debbie! You've asked a question that's tricky to answer – in short, we aren't exactly sure how you'd reduce an entire Bargello design. However, we do have several Bargello books that might have a pattern in the size you're looking for. I'm sorry we can't be of more help with this one, but thank you for your question! –Jenny

—Debbie Weiss on August 28, 2016

Thank you so much. takes me a step forward in adding seam allowances when cutting (now just need to understand for diamonds and prisms and hexagons).

—sharon on September 29, 2016

More math please. Thank you

—linda dennis on October 24, 2016

Thank you for your clear explanations. Maybe I won't be afraid to attempt starting a quilting project now.

—Loretta Garcia on November 6, 2016

Wow! You've reduced the usual mathematical gobbledy-gook into a single, simple phrase – "ya start with what you want, and divide by what you got". Genius. As is the spot-check of knowing that going smaller will have a dividing ratio of less than 0.9999, and going larger will have a multiplying ratio of more than 1.0000. Hats off to you. 😊

—Mary Clark on November 12, 2016

I could cry with awe, amazement and gratitude for what you've given us. My hat is off to you and my thanks must be multifold from readers who don't respond...from the multitude..thank you

So glad we could be of help, Lynette! –Jenny

—Lynette A daugherty on December 12, 2016

Haven't tried this yet, but I plan to. It boggles my mind just trying to figure out something like this and most of the time it does not work. Thank you so much for the easy to understand directions. I'm sure I speak not only for myself but for others that have the same problem. We appreciate you sharing with us. :)

—ella ruth on January 2, 2017

Thank you!Finally someone explained quilt math in a way I can understand. I have always been math challenged so I am definitely not rolling my eyes! I am saving this page so I can come back to it often to see if you post additional math info.Thanks so much.

—DQ on January 2, 2017

Thank you. Now I will not waste so much paper at the photo copier.I have always found it too hard to take the time and study the quilt math.

—phyl gulvin on January 3, 2017

Thank you for taking the time to post this tutorial.
I enjoyed your clever prose as much as the information
you shared.

Thanks so much for your post! I'm not a math person either but you've made it so easy! This is wonderful information.

Thank you for making a daunting task so easy! I have always been a bit dyslexic with numbers and have made a few boo-boos in my time (in my previous life, I was a graphic designer – not a good trait to have, and I had to concentrate especially hard when we were creating catalogues filed with numerical information)! I have copied and saved this onto a "page" document and left it on my computer desktop so I can access it anytime… Once again, thank you so much!

*filled with – even my spelling has gone now! Hehehe!

Thank you so much! I have never been able to figure this out before. Also this method will work for many images besides quilting. So happy 🙂 :

Thank you for this info. I absolutely dread math and this is so helpful.

I'm math challenged, so this article was invaluable to me, thank you so much!

The first part of your explanation I could follow but then my brain just goes blank. For this very reason I am so blessed to have no less than 3 quilt friends who are math savvy. Unlike my husband and children they don't feel the need to try and teach me how to find the answer.

Super easy to understand. I love the helpful phrase! As much as I scare away from math, I am always interested in trying to figure out how and why it works. Thank you for the great explanation.😁

Thank you so much we don't always see what is before our eyes. I know this formula by heart from photo copying patterns to paint, it did not occur to me to use it to change a block size, Derrr.

Thank you so much for this invaluable information….. I do a lot of enlarging and reducing on our copy machine, but it is by guess…wasting many pages and an abundance of ink……You're a paper-saver of the year for sharing !!! I imagine there are many trees around the world who thank you;)

Thanks you for the easy to understand Block sizing tutorial. In my younger days I was, indeed, math challenged. When I started quilting my daughters would often say "mom, I don't know how you figure out all that geometry . . ." To me it wasn't geometry, it was quilting – my hobby, what I loved to do. BUT resizing blocks – up or down – gave me a math headache. You simplified it and gave an easy to follow formula which I will be sharing with my quilting sisters. ❤

I just discovered your post from a Pinterest page, this is more valuable than gold! TFS.

Thanks for this great info. I'll definitely be saving this in my computer for further reference. Do you have any my magically equations for calculating the yardage needed in a quilt when there are several different color & forms. Sometimes I see a quilt & would like to reproduce it but can't find the pattern.

Thank you for the fun thought process. Yes, please share more information.

Oh my goodness — you've just relieved a major stress for this math-impaired sewist. The best part of your insanely helpful quilt math is that I can now adjust my brand new nephew's baby quilt square calculations WITHOUT pestering my engineer husband! I look like a much more capable woman, and can't we all agree that's a happy thing? Thank you for alleviating so many humbling requests for assistance!

This is wonderful. The enlarging was a bit more however I know I can get it when I have it in hand. I almost always am reducing a pattern because we now have a small dinning room table that most runners (which I get tired of only having runners) are 1/3 too big. I like having center table cloths or table cloths that are small enough where they are squares but I turn them more like a diamond shape on the table or have a square that is small enough where is hangs over two sides (short sides) about 6 inches and a couple 3 inches from the edge of the other two sides of the table. I love to do applique pieces but often find them too large. This little saying will stick in my head. I also can type this on a piece of sticky paper and put it on the wall next to my scanner/printer. The other MATH item I at first had a terrible time with is reducing block sizing or how to go from a queen to a twin or crib. I was able to find a chart to at least tell me sizes another one that did some block sizes. Which to me is much easier to figure out if they tell you the block size and how many blocks on each side or it is easy to look at the pattern and count the number of blocks on each size. This new pattern I am wanting to start on is a 24 1/2 by 31 1/2. 63 blocks total.7×9 block. Which I will want to actually add some blocks, which is different then what your teaching here, which I really needed and hadn't found anything as easy as this. Talking about MATH and quilting, another thing is that I have found most patterns of quilts are like Queen size. I often want them to be Twin, crib/lap size or for my new dinner room table. Now that my husband and I have empty nest, it really helped for us to get a smaller dinning room set, we found at a craft sale. We raised 4 boys and it always seemed one or two of them had a friend for supper so we never took the one leaf out of our dinning room table. Once they were all gone, we took the leaf out but was still too big even with 2 small grandchildren visits. Empty nest has been horrible. It's been 4 years however we had a son that came back from Iraq and stayed a year. Then another son came back with a grandson. We had a total of 28 1/2 years of children in our home. We came to the conclusion, we would never get over the empty nest, we just had to get a smaller table and send/bring what food was left over from supper to our sons house. Two of my daughter in laws love it !! One son lives too far out of town, 28 miles though on his nights off, he has come into town and brought home the extra food for the next night. I have one daughter in law that is glutton and lactose free. I can help some, we bring over fresh produce during the summer, from our garden and we buy fruit for them.
Sorry, Back to quilting,Most of the time the quilt size that works best is a square no bigger than 38" for this table. this new pattern is So I believe I will be needing to add 18 (2 rows of 9) blocks to one side. Each block is 3 1/2 x3 1/2. Wish me luck. Thanks again Cheryl

Luck! Thanks for sharing your story, Cheryl! –Jenny

Thank you so much this information – very easy to understand and it works!
I have made a hard copy so that I can easily refer back to it.
Much appreciated!
Jean

I have a quilting Maths question that I'm struggling with
I would like my finished blocks to be 10" x 10"
So I can sew 10 blocks across by 10 blocks down to make a King size quilt
The pattern I decided to use was a Disappearing 4 PATCH
So I'm.trying to work out the size of the squares I need to cut out of yardage to start with???
Any Ideas???
Do I cut 12" x 12" blocks then cut them in Quarters? To end with a 10" x 10" block????
Someone Please help me??? 😫
I've asked in Facebook groups but no one replies

—*Donna Johnson on August 6, 2021*

I was a math major in college. Numbers are easier to work with than words. However, trying to figure out how to reduce the size of my quilt patterns to a 1" = 12" scale – yup, hit a road block. Your simple method made my life much easier and I don't have to admit to my granddaughters that I had a math problem in making quilts for their doll houses!! Thanks!

—*Barbara on July 3, 2022*

Correction – I've been working with 1" items all morning. That scale is 12"=1" scale.

—*Barbara on July 3, 2022*

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