

DRAW-ON-THE-LINE DRAFTING

These charts will help with drafting your quilt blocks on graph paper. First you need to know the finished size of the block and the number of units across. Some block books will give the number of units across which will make it easier for you to choose the correct chart for the block. Sometimes you can easily count the units. For more challenging blocks that are difficult to break down, make copies of the grid sheets on vellum paper or inkjet transparencies available at most office supply stores. These grid units are 2" square. Some of them can be used as 1" squares where the dashed line divides them into quarters. For instance, the 8 x 8 grid would be a 4 x 4 grid if you place 1/4 of it on a 1" square. For block drawings other than 1" or 2" you will need to scale the grid sheets in the print dialog box to match the size of the quilt block drawing. Divide the exact block size drawing by 2" to get the percentage for resizing the grid sheet. Most blocks in books are not scaled to even numbers so you will need to measure accurately and convert it to the nearest decimal measurement. Print on plain paper until you find the correct percentage before printing on vellum paper or inkjet transparencies. Place the different grids on the block drawing until you find one with lines that match. Placing the grid over the block will also make it easier to resize the block correctly on graph paper.

On the charts the **Finished Block** is the size you want your blocks to be after they are sewn. The **Unit Size** is the size of each unit on the grid that the block is based on. Some pieces of your block design will cover more than one unit. The **Grid Size** is the number of squares per inch on the graph paper that is best for drawing this particular block size.

Each Unit Size starts at 1/2" and the graph paper ranges from 2 to 16 squares per inch. If you want your Unit Size to be smaller than 1/2" for miniature quilts, you can draft the block using the 1/2" measurement then reduce it on a copier to the desired size.

Different colors are used for the different graph paper sizes. Blue and cyan are used for the 2/inch and 4/inch. These are the easiest sizes to draft and are best for beginners. Green is used for the 8/inch. My 8/inch graph paper is also my 16/inch graph paper but I chose to separate these by color as the 8/inch is still fairly easy to draft. Red is used for the 16/inch. These are more challenging blocks and are usually paper pieced. All of the other graph paper sizes are not easily broken down into measurements that can be cut accurately with a rotary cutter so these blocks would also be best for paper piecing. The 12/inch which also works for 3/inch and 6/inch is pink, the 9/inch is orange, the 10/inch that also works for 5/inch is red-orange, and the 14/inch that also works for 7/inch is purple.

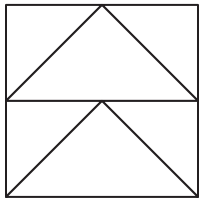
DECIMAL TO FRACTION CONVERSION

.125 = 1/8	.0625 = 1/16	.0833 = 1/12	.1 = 1/10	.0714 = 1/14	.1111 = 1/9
.25 = 2/8, 1/4	.125 = 2/16, 1/8	.1667 = 2/12, 1/6	.2 = 2/10, 1/5	.1429 = 2/14, 1/7	.2222 = 2/9
.375 = 3/8	.1875 = 3/16	.25 = 3/12, 1/4	.3 = 3/10	.2143 = 3/14	.3333 = 3/9, 1/3
.5 = 4/8, 1/2	.25 = 4/16, 2/8, 1/4	.3333 = 4/12, 2/6, 1/3	.4 = 4/10, 2/5	.2857 = 4/14, 2/7	.4444 = 4/9
.625 = 5/8	.3125 = 5/16	.4167 = 5/12	.5 = 5/10, 1/2	.3571 = 5/14	.5556 = 5/9
.75 = 6/8, 3/4	.375 = 6/16, 3/8	.5 = 6/12, 3/6, 1/2	.6 = 6/10, 3/5	.4286 = 6/14, 3/7	.6667 = 6/9, 2/3
.875 = 7/8	.4375 = 7/16	.5833 = 7/12	.7 = 7/10	.5 = 7/14, 1/2	.7778 = 7/9
	.5 = 8/16, 4/8, 1/2	.6667 = 8/12, 4/6, 2/3	.8 = 8/10, 4/5	.5714 = 8/14, 4/7	.8889 = 8/9
	.5625 = 9/16	.75 = 9/12, 3/4	.9 = 9/10	.6429 = 9/14	
	.625 = 10/16, 5/8	.8333 = 10/12, 5/6		.7143 = 10/14, 5/7	
	.6875 = 11/16	.9167 = 11/12		.7857 = 11/14	
	.75 = 12/16, 6/8, 3/4			.8571 = 12/14, 7/7	
	.8125 = 13/16			.9286 = 13/14	
	.875 = 14/16, 7/8				
	.9375 = 15/16				

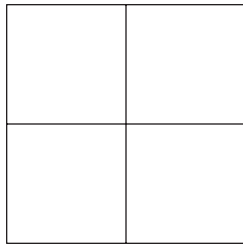
DRAW-ON-THE-LINE DRAFTING CHART 1

2 x 2 base grid

Four Patch

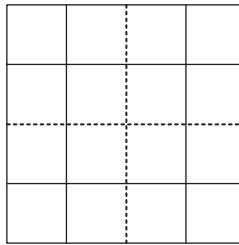


2/inch



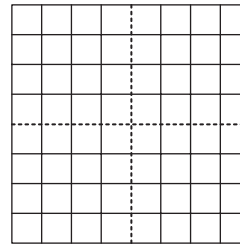
2 x 2 grid

4/inch



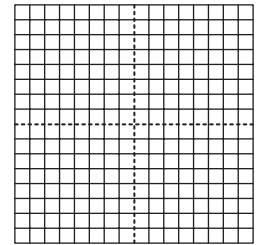
4 x 4 grid

8/inch



8 x 8 grid

16/inch



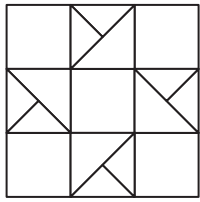
16 x 16 grid

Finished Block	Unit Size	Grid Size	Unit Size	Grid Size	Unit Size	Grid Size	Unit Size	Grid Size
1"	1/2"	2/inch	---	---	---	---	---	---
1 1/2"	3/4"	4/inch	---	---	---	---	---	---
2"	1"	2/inch	1/2"	2/inch	---	---	---	---
2 1/2"	1 1/4"	4/inch	5/8"	8/inch	---	---	---	---
3"	1 1/2"	2/inch	3/4"	4/inch	---	---	---	---
3 1/2"	1 3/4"	4/inch	7/8"	8/inch	---	---	---	---
4"	2"	2/inch	1"	2/inch	1/2"	2/inch	---	---
4 1/2"	2 1/4"	4/inch	1 1/8"	8/inch	9/16"	16/inch	---	---
5"	2 1/2"	2/inch	1 1/4"	4/inch	5/8"	8/inch	---	---
5 1/2"	2 3/4"	4/inch	1 3/8"	8/inch	11/16"	16/inch	---	---
6"	3"	2/inch	1 1/2"	2/inch	3/4"	4/inch	---	---
6 1/2"	3 1/4"	4/inch	1 5/8"	8/inch	13/16"	16/inch	---	---
7"	3 1/2"	2/inch	1 3/4"	4/inch	7/8"	8/inch	---	---
7 1/2"	3 3/4"	4/inch	1 7/8"	8/inch	15/16"	16/inch	---	---
8"	4"	2/inch	2"	2/inch	1"	2/inch	1/2"	2/inch
8 1/2"	4 1/4"	4/inch	2 1/8"	8/inch	1 1/16"	16/inch	---	---
9"	4 1/2"	2/inch	2 1/4"	4/inch	1 1/8"	8/inch	9/16"	16/inch
9 1/2"	4 3/4"	4/inch	2 3/8"	8/inch	1 3/16"	16/inch	---	---
10"	5"	2/inch	2 1/2"	2/inch	1 1/4"	4/inch	5/8"	8/inch
10 1/2"	5 1/4"	4/inch	2 5/8"	8/inch	1 5/16"	16/inch	---	---
11"	5 1/2"	2/inch	2 3/4"	4/inch	1 3/8"	8/inch	1 1/16"	16/inch
11 1/2"	5 3/4"	4/inch	2 7/8"	8/inch	1 7/16"	16/inch	---	---
12"	6"	2/inch	3"	2/inch	1 1/2"	2/inch	3/4"	4/inch
12 1/2"	6 1/4"	4/inch	3 1/8"	8/inch	1 9/16"	16/inch	---	---
13"	6 1/2"	2/inch	3 1/4"	4/inch	1 5/8"	8/inch	13/16"	16/inch
13 1/2"	6 3/4"	4/inch	3 3/8"	8/inch	1 11/16"	16/inch	---	---
14"	7"	2/inch	3 1/2"	2/inch	1 3/4"	4/inch	7/8"	8/inch
14 1/2"	7 1/4"	4/inch	3 5/8"	8/inch	1 13/16"	16/inch	---	---
15"	7 1/2"	2/inch	3 3/4"	4/inch	1 7/8"	8/inch	15/16"	16/inch
15 1/2"	7 3/4"	4/inch	3 7/8"	8/inch	1 15/16"	16/inch	---	---
16"	8"	2/inch	4"	2/inch	2"	2/inch	1"	2/inch

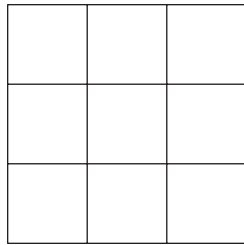
DRAW-ON-THE-LINE DRAFTING CHART 2

3 x 3 base grid

Nine Patch

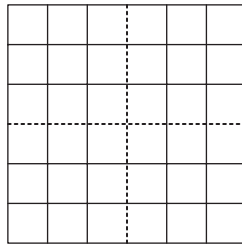


■ 2/inch



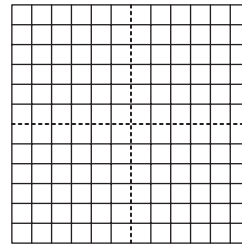
3 x 3 grid

■ 4/inch



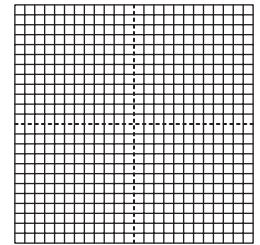
6 x 6 grid

■ 8/inch



12 x 12 grid

■ 12/inch



24 x 24 grid

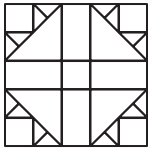
■ 16/inch

Finished Block	Unit Size	Grid Size	Unit Size	Grid Size	Unit Size	Grid Size	Unit Size	Grid Size
1 1/2"	1/2"	2/inch	---	---	---	---	---	---
2"	2/3"	12/inch	---	---	---	---	---	---
2 1/2"	5/6"	12/inch	---	---	---	---	---	---
3"	1"	2/inch	1/2"	2/inch	---	---	---	---
3 1/2"	1 1/6"	12/inch	7/12"	12/inch	---	---	---	---
4"	1 1/3"	12/inch	2/3"	12/inch	---	---	---	---
4 1/2"	1 1/2"	2/inch	3/4"	4/inch	---	---	---	---
5"	1 2/3"	12/inch	5/6"	12/inch	---	---	---	---
5 1/2"	1 5/6"	12/inch	11/12"	12/inch	---	---	---	---
6"	2"	2/inch	1"	2/inch	1/2"	2/inch	---	---
6 1/2"	2 1/6"	12/inch	1 1/12"	12/inch	---	---	---	---
7"	2 1/3"	12/inch	1 1/6"	12/inch	7/12"	12/inch	---	---
7 1/2"	2 1/2"	2/inch	1 1/4"	4/inch	5/8"	8/inch	---	---
8"	2 2/3"	12/inch	1 1/3"	12/inch	2/3"	12/inch	---	---
8 1/2"	2 5/6"	12/inch	1 5/12"	12/inch	---	---	---	---
9"	3"	2/inch	1 1/2"	2/inch	3/4"	4/inch	---	---
9 1/2"	3 1/6"	12/inch	1 7/12"	12/inch	---	---	---	---
10"	3 1/3"	12/inch	1 2/3"	12/inch	5/6"	12/inch	---	---
10 1/2"	3 1/2"	2/inch	1 3/4"	4/inch	7/8"	8/inch	---	---
11"	3 2/3"	12/inch	1 5/6"	12/inch	11/12"	12/inch	---	---
11 1/2"	3 5/6"	12/inch	1 11/12"	12/inch	---	---	---	---
12"	4"	2/inch	2"	2/inch	1"	2/inch	1/2"	2/inch
12 1/2"	4 1/6"	12/inch	2 1/12"	12/inch	---	---	---	---
13"	4 1/3"	12/inch	2 1/6"	12/inch	1 1/12"	12/inch	---	---
13 1/2"	4 1/2"	2/inch	2 1/4"	4/inch	1 1/8"	8/inch	9/16"	16/inch
14"	4 2/3"	12/inch	2 1/3"	12/inch	1 1/6"	12/inch	---	---
14 1/2"	4 5/6"	12/inch	2 5/12"	12/inch	---	---	---	---
15"	5"	2/inch	2 1/2"	2/inch	1 1/4"	4/inch	5/8"	8/inch
15 1/2"	5 1/6"	12/inch	2 7/12"	12/inch	---	---	---	---
16"	5 1/3"	12/inch	2 2/3"	12/inch	1 1/3"	12/inch	2/3"	12/inch

DRAW-ON-THE-LINE DRAFTING CHART 3

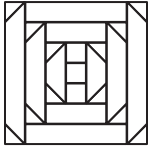
5 x 5 base grid

Five Patch



7 x 7 base grid

Seven Patch

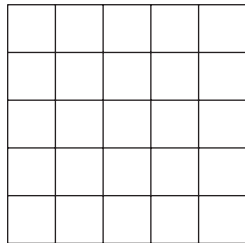


2/inch

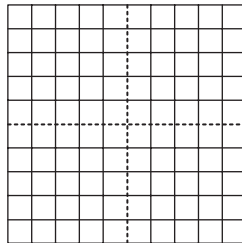
4/inch

10/inch

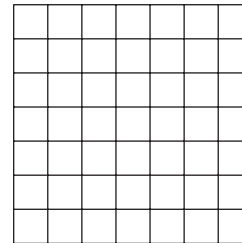
14/inch



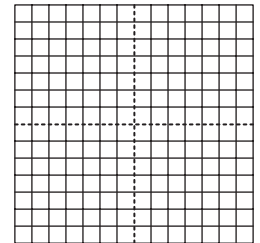
5 x 5 grid



10 x 10 grid



7 x 7 grid



14 x 14 grid

Finished Block	Unit Size	Grid Size	Unit Size	Grid Size	Unit Size	Grid Size	Unit Size	Grid Size
2 1/2"	1/2"	2/inch	---	---	---	---	---	---
3"	3/5"	10/inch	---	---	---	---	---	---
3 1/2"	7/10"	10/inch	---	---	1/2"	2/inch	---	---
4"	4/5"	10/inch	---	---	4/7"	14/inch	---	---
4 1/2"	9/10"	10/inch	---	---	9/14"	14/inch	---	---
5"	1"	2/inch	1/2"	2/inch	5/7"	14/inch	---	---
5 1/2"	1 1/10"	10/inch	---	---	11/14"	14/inch	---	---
6"	1 1/5"	10/inch	3/5"	10/inch	6/7"	14/inch	---	---
6 1/2"	1 3/10"	10/inch	---	---	13/14"	14/inch	---	---
7"	1 2/5"	10/inch	7/10"	10/inch	1"	2/inch	1/2"	2/inch
7 1/2"	1 1/2"	2/inch	3/4"	4/inch	1 1/14"	14/inch	---	---
8"	1 3/5"	10/inch	4/5"	10/inch	1 1/7"	14/inch	4/7"	14/inch
8 1/2"	1 7/10"	10/inch	---	---	1 3/14"	14/inch	---	---
9"	1 4/5"	10/inch	9/10"	10/inch	1 2/7"	14/inch	9/14"	14/inch
9 1/2"	1 9/10"	10/inch	---	---	1 5/14"	14/inch	---	---
10"	2"	2/inch	1"	2/inch	1 3/7"	14/inch	5/7"	14/inch
10 1/2"	2 1/10"	10/inch	---	---	1 1/2"	2/inch	3/4"	4/inch
11"	2 1/5"	10/inch	1 1/10"	10/inch	1 4/7"	14/inch	1 1/14"	14/inch
11 1/2"	2 3/10"	10/inch	---	---	1 9/14"	14/inch	---	---
12"	2 2/5"	10/inch	1 1/5"	10/inch	1 5/7"	14/inch	6/7"	14/inch
12 1/2"	2 1/2"	2/inch	1 1/4"	4/inch	1 11/14"	14/inch	---	---
13"	2 3/5"	10/inch	1 3/10"	10/inch	1 6/7"	14/inch	1 3/14"	14/inch
13 1/2"	2 7/10"	10/inch	---	---	1 13/14"	14/inch	---	---
14"	2 4/5"	10/inch	1 2/5"	10/inch	2"	2/inch	1"	2/inch
14 1/2"	2 9/10"	10/inch	---	---	2 1/14"	14/inch	---	---
15"	3"	2/inch	1 1/2"	2/inch	2 1/7"	14/inch	1 1/14"	14/inch
15 1/2"	3 1/10"	10/inch	---	---	2 3/14"	14/inch	---	---
16"	3 1/5"	10/inch	1 3/5"	10/inch	2 2/7"	14/inch	1 1/7"	14/inch

DRAW-ON-THE-LINE DRAFTING CHART 4

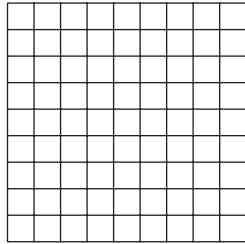
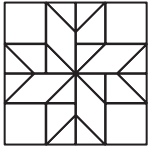
See next page for more information on drafting 8-pointed stars and octagons.

9 x 9 base grid

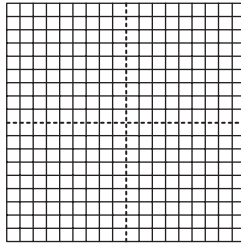


2/inch
 4/inch
 8/inch
 9/inch
 12/inch
 16/inch

24 x 24 base grid

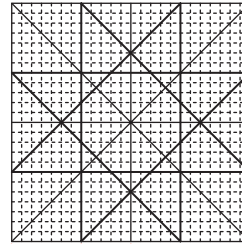


9 x 9 grid



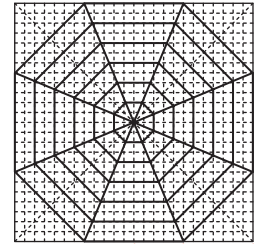
18x18 grid

8-pointed star



A B

octagon



B A

24 x 24 grid

Finished Block	Unit Size	Grid Size	Unit Size	Grid Size	Unit Size	Grid Size	A Width	B Width
3"	---	---	---	---	1/8"	8/inch	7/8"	5/8"
3 1/2"	---	---	---	---	---	---	---	---
4"	---	---	---	---	1/6"	12/inch	1 1/6"	5/6"
4 1/2"	1/2"	2/inch	---	---	3/16"	16/inch	15/16"	15/16"
5"	5/9"	9/inch	---	---	---	---	---	---
5 1/2"	---	---	---	---	---	---	---	---
6"	2/3"	12/inch	---	---	1/4"	4/inch	1 3/4"	1 1/4"
6 1/2"	---	---	---	---	---	---	---	---
7"	7/9"	9/inch	---	---	---	---	---	---
7 1/2"	5/6"	12/inch	---	---	5/16"	16/inch	2 3/16"	1 9/16"
8"	8/9"	9/inch	---	---	1/3"	12/inch	2 1/3"	1 2/3"
8 1/2"	---	---	---	---	---	---	---	---
9"	1"	2/inch	1/2"	2/inch	3/8"	8/inch	2 5/8"	1 7/8"
9 1/2"	---	---	---	---	---	---	---	---
10"	1 1/9"	9/inch	---	---	5/12"	12/inch	2 11/12"	2 1/12"
10 1/2"	1 1/6"	12/inch	7/12"	12/inch	7/16"	16/inch	3 1/16"	2 3/16"
11"	1 2/9"	9/inch	---	---	---	---	---	---
11 1/2"	---	---	---	---	---	---	---	---
12"	1 1/3"	12/inch	2/3"	12/inch	1/2"	2/inch	3 1/2"	2 1/2"
12 1/2"	---	---	---	---	---	---	---	---
13"	1 4/9"	9/inch	---	---	---	---	---	---
13 1/2"	1 1/2"	2/inch	3/4"	4/inch	9/16"	16/inch	3 15/16"	2 13/16"
14"	1 5/9"	9/inch	---	---	---	---	---	---
14 1/2"	---	---	---	---	---	---	---	---
15"	1 2/3"	12/inch	5/6"	12/inch	5/8"	8/inch	4 3/8"	3 1/8"
15 1/2"	---	---	---	---	---	---	---	---
16"	1 7/9"	9/inch	---	---	2/3"	12/inch	4 2/3"	3 1/3"