

Sock Club - January 2022  
Measuring and gauge swatching for socks that fit  
Source: Custom Socks: Knit to fit your feet by Kate Atherley 2015

Negative Ease: fits slightly smaller than the foot  
-helps the sock stay in place on the foot and leg  
-wears better because there is no extra friction  
-10% less than actual foot or ankle circumference and .5" less than length (child .25-.5")

Sock Patterns often make assumptions, you should check the gauge and your own measurements and do the math

-may give 'finished measurements', i.e.the actual size of the finished sock  
-may describe 'to fit' or 'foot size', i.e. the actual size of the intended foot  
-shoe sizes often assume longer feet are wider, same if sock sizing is based only on foot length  
-Small/Medium/Large compared to who?, use gauge to check

In 500 sock knitters (mostly N. American women) in a survey found the following  
Foot (A) and Ankle (B) Circumference are nearly equal  
Foot Circumference (A) is 5-10% less than Length (D)  
Gusset (C) is 10-15% greater than Foot Circumference (A)  
Heel Diagonal (F) is 35% greater than Foot Circumference (A)  
Low Calf Circumference (E) is 12-50% greater than Ankle Circumference (B)

**Measure both of your feet in inches to the nearest 1/8<sup>th</sup>** **Left** **Right**

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**A Foot Circumference - around the ball of the foot**

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**B Ankle Circumference - at narrowest part of leg above anklebones**

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**C Gusset Circumference - Around foot as close to leg as possible**

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**D Foot Length - lay ruler on floor**

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Convert all of your foot measurements to the nearest thousandth place

For example,  $8 \frac{7}{8} = 8.875$

- 1/8 = .125
- 2/8 = 1/4 = .25
- 3/8 = .375
- 4/8 = 1/2 = .5
- 5/8 = .625
- 6/8 = 3/4 = .75
- 7/8 = .875

### Make your gauge swatch

Cast on 40 stitches with the yarn and needles you want to use (not single points) Knit one row and slide the stitches to the right end of the needle. Carry working yarn loosely behind the stitches and knit across the stitches. To prevent edge stitches from being too loose, consider knitting the first and last stitches through the back loop

Work 3 inches of Stockinette stitch this way (knitting all stitches every row from the right edge of the smooth side of the swatch) record # rows \_\_\_\_\_

Continue and work 1 inch of K1P1 ribbing and record # rows \_\_\_\_\_

Bind off loosely in pattern (ribbing)

Cut yarn and trim to 2 inches, submerge in cool water until saturated, blot dry without stretching or twisting the swatch and air dry

If your swatch is rolling up, you can steam it with an iron (not touching) or press it through a damp cotton or linen cloth so that it will lie flat.

### Counting, Measuring and Calculating

A calculator and a ruler or rigid tape measure will help a lot for this step

1. Measure horizontally across the stockinette stitch center of the swatch to the nearest 1/8th inch \_\_\_\_\_ and convert as the foot measurements. Pause a moment: Do your beginning and end stitches seem untidy? Consider omitting them and only measure across the more even 38 internal stitches

2. Stitch Gauge = Number of Stitches / Width in inches to the nearest 1/8th inch across middle of the stockinette section. Record your **Stitch gauge** \_\_\_\_\_

3. Row gauge = Number of Rows in stockinette section / height in inches to the nearest 1/8th inch in the center of the stockinette section. Record your **Row gauge** \_\_\_\_\_

4. Calculate your Sock Cuff size for Top Down socks by multiplying Ankle circumference (B) x 0.9 = Cuff circumference (Remember negative ease?) \_\_\_\_\_

5. Multiply your cuff circumference by your gauge for the ideal number of stitches, then choose a number near it divisible by 8 or 4. \_\_\_\_\_

ie. 7.988 inches x 9.21 st/in = 73.56 stitches, my choices need to be divisible by 4 or 8, so 72 stitches.

6. Repeat for your other ankle circumference \_\_\_\_\_

If there is a significant difference, consider making the one sock smaller on top or make them interchangeable and do the same cast on number here as well.