

# CURVILINEAR HEEL RECIPE



This sock heel can be plugged into any existing toe-up sock pattern, even those originally designed with short-row or afterthought heels. Simply follow these instructions to add the gusset and heel/heel flap to your pattern of choice.

It's my modification of a traditional reverse gusset/heel flap, worked out after many pairs of socks that didn't fit just exactly right.

## **KEY:**

M1R	Make a Right-leaning Increase
M1L	Make a Left-leaning Increase
P2TOG	Purl two stitches together
SSK	Slip, Slip, Knit

***First things first*** – you'll need to know when to start the heel.

### ***For basic adult socks:***

- If your sock has 48 stitches around, you need 35 rows for the gusset and heel turn.
- If your sock has 64 stitches around, you need 47 rows for the gusset and heel turn.
- If your sock has 72 stitches around, you need 53 rows for the gusset and heel turn.

For more details, I highly recommend this excellent post by debbaworks:  
<http://debbaworks.tumblr.com/post/5913370114/how-to-fit-toe-up-socks>



**Measure your row gauge** – lay the socks out flat, use a measuring tape, and measure how many rows are in one inch.

**Write that number down.**

Next, figure out how long your sock needs to be, and subtract 10%.

Here is a link to shoe size charts:

<http://www.zappos.com/c/shoe-size-conversion>

Plugging in my dimensions – my shoe size is a women's 11.5. That means that my finished sock should be around 9.67 inches long after subtracting 10% for negative ease.

On a **64 inch** sock, needing **47 rows** for the gusset and heel, with a row gauge of **12 rows per inch**, *I need to knit 5.75" before beginning the gusset.*

***Row gauge matters!***

***For 11 rows per inch, the length I need to knit before beginning the gusset changes to 5.4".***

***It's critical to measure an accurate row gauge.***

So...once you know how long you need to knit your sock before the gusset, it's time to sort out the gusset and heel.

***I break the increases down this way:***

**50%** of increases in the middle of the foot

**25%** of increases between the beginning / end of the round and the middle increases

**25%** of increases near the edges of the foot

***Since I magic loop, this is how it works for a 64 stitch sock:***

- Knit stitches on front needle
- On back needle, knit 15 stitches, M1R, place marker, knit 2, place marker, M1L, knit 15
- (34 stitches total).
- \*Knit one round plain.

- Knit to marker, M1R, slip marker, knit 2, slip marker, M1L, knit to end (*36 stitches total*).
- Repeat from \* until you have a total of **48 stitches** on the back needle.
- Knit stitches on front needle – on back needle, knit 16 stitches, M1R, place marker, knit 16, place marker, M1L, knit 16 (*50 stitches total*).
- \*Knit one round plain.
- Knit to marker, M1R, slip marker, knit 16, slip marker, M1L, knit to end (*52 stitches total*).
- Repeat from \* until you have a total of **56 stitches** on the back needle.
- Knit stitches on front needle – on back needle, knit 10 stitches, M1R, place marker, knit 36, place marker, M1L, knit 10 (*58 stitches total*).
- \*Knit one round plain.
- Knit to marker, M1R, slip marker, knit 36, slip marker, M1L, knit to end (*60 stitches total*).
- Repeat from \* until you have a total of **64 stitches** on the back needle.

### **To turn the heel:**

Knit stitches on front needle.

On back needle, knit 16, place marker, knit 31, slip 1 stitch, place marker, wrap and turn slipped stitch, purl to one stitch before marker, slip, wrap, and turn.

- Knit to two stitches before the last wrapped stitch, slip, wrap, and turn (you'll be wrapping every other stitch.)
- Purl to two stitches before the last wrapped stitch, slip, wrap, and turn.
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### **Repeat these two rows until you have 4 stitches unwrapped.**

- Purl until one stitch before the marker, picking up wraps and working them with the stitch. When you reach the stitch before the marker, slip it, remove the marker, and place the slipped stitch onto the lefthand needle. Purl the stitch, the wrap, and one more stitch together.
- Knit until one stitch before the marker, picking up wraps and working them with the stitch. When you reach the stitch before the marker, slip it, remove the marker, and place the slipped stitch onto the lefthand needle. SSK the stitch, the wrap, and one more stitch together.
- \*Purl across until one stitch before the gap, then P2TOG.
- Knit across until one stitch before the gap, then SSK.

### **Repeat from \* until you have 32 stitches on the back needle.**

*If you normally work a reinforcing slip stitch in your heel, you can work it on each knit row as you form the heel flap.*

Once you are back to the original amount of stitches on your back needle, continue on your way, happily knitting your now-well-fitting sock :D



The split gussets function much the same way a bust dart does in a sweater, allowing the sock heel to hug the bottom of your foot and flex where it should, without creating excess/baggy fabric.



Want to use this heel in a sock pattern? That's fine ☺

**Terms of use:**

Use the name "Curvilinear Heel"

Link to <http://whatareyoumakingnow.com/curvilinear-heel>

(Optional: if you want to be really nice...gift me a copy of the pattern on Ravelry – I'm [tatmom](#) there. I'd love to see what you design with this!)