

Needle & Arts

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Basic Formula for Socks Knitted with 4 or 5 DPN's or 2 Circular needles or Magic Loop method

| Size | Sock yarn 30-32 sts on 2 – 2.75 mm needles Cast on | DK Weight yarn 24-26 sts on 3-4 mm needles Cast on | Worsted Weight Yarn 20-22 sts on 4 – 5 mm needles Cast on |
|-------------------------|---|---|---|
| Baby | 40 | 32 | 28 |
| Child 1-2 | 44 | 32 | 32 |
| Child 3-4 | 44 | 32 | 32 |
| Child 6-8 | 48 | 36 | 32 |
| Lge child/X-small Adult | 56 | 44 | 36 |
| Small Adult | 60 | 48 | 40 |
| Medium Adult | 60 | 48 | 40 |
| Large Adult | 64 | 52 | 44 |
| X-large Adult | 68 | 56 | 48 |

This is a guide only. For a broader than average foot add more stitches.

Also note that socks are usually knitted to a tighter tension than normal as they will stretch out with wear.

You should know by now if you are a tight or a loose knitter. The average knitter would use a 2.5mm needle for sock yarn, a 3.5mm for DK and a 4 mm for Worsted weight yarn.

Stuff you might like to know before you begin:

- You can use any yarn you like to knit socks, but bear in mind that yarn specifically designed for socks contains a bit of nylon or even silk for wear. Sock yarns which contain alpaca or cashmere which, while beautiful to wear, will not give you the same wear as one that contains just wool and nylon. Save those socks for best!
- Long tail cast on will give you a more flexible edge, particularly if cast on over two needles. On heavier yarns, you will need about 1 inch per stitch. 26 inches of sock yarn will cast on 60 stitches plus a tail for darning in, 40 stitches requires 19 inches. (More yarn will be required if you cast on over 2 needles.)
- To join into a round, cross the first and last stitches (crochet hook is useful) or cast on an extra stitch and knit it together with the first stitch cast on. You can also, cast on an extra stitch, slip the first stitch cast on from the left hand needle to the right hand needle, pass the last cast on stitch over the slipped stitch and off the needle, pass the slipped stitch back to the left hand needle. Some prefer to rib the first two or three rounds flat and then join, closing the little gap created when the end of the yarn is darned in.
- Self striping sock yarn seems to give a better pattern if knitted from the outside of the ball.
- 1 x 100 gram ball of sock yarn will make a man's sock, size 12, and still leave some left over. For a worsted weight yarn you will need 150 grams for a man's sock.
- If you are unsure whether you will have enough yarn, you can use a co-ordinating yarn for the heel and toe (Sisu is a great yarn for this purpose as it comes in many solid colours in 50 gram balls)

- If you want your socks to match perfectly, choose a point in the yarn where the colour or pattern changes, break the yarn and measure to the point where you make the slip knot for the long tail cast on, or where you start your cable cast on.. Make a note of the measurement. If using two balls of yarn, match the pattern before you start knitting.

The above is not "written in stone" and is just a guide. For example you might want to knit a sock with cables or with a ribbed leg and top of foot. In that case, you will need to cast on a few more stitches. If you are knitting for someone with small ankles and wide feet, you may not need to decrease the gusset stitches to leave more stitches on the needles for the foot.

Ssk = slip 1 knitwise, slip 1 purlwise, insert left needle point through the front of the loops of these stitches and knit together. This method gives a much flatter decrease than the conventional slip 2 stitches knitwise separately. To make this decrease look exactly the same as the (K2 tog.) decrease, knit the decreased stitch through the back of the loop on the next round.

Begin:

Cast on the required number of stitches and join into a round. Knit 1 – 2.5 inches (2.5 – 7 cms) of ribbing of your choice, change to stocking stitch and knit required length for leg, (measured from cast on edge) 3 – 4 inches (8 – 10 cms) for a child's sock, approx. 6 inches (15 cms) for women's socks, 7 – 8 inches (18 – 21 cms) for men's socks. (These lengths, of course, can be changed but I find if I go longer than about 8 inches for a man with large feet, e.g. over a size 12 shoe, I may run short of yarn – see note above)

The heel flap is knitted on half the number of stitches cast on. E.g. if you cast on 40 stitches, the heel flap would be knitted on 20 stitches. Slip 1st stitch on every row purlwise to create a "chain" along both edges of heel flap. The number of rows knitted for the heel flap is 2 less than the number of stitches (in our example 18 rows if you have 20 heel flap stitches, [9 "chain" stitches along the sides])

The heel can be knitted in plain stocking stitch or, for reinforcement, an extra fine yarn (eg darning yarn or the reinforcement yarn provided by some manufacturers) can be added and knitted in. The heel flap can also be knitted in a slipstitch pattern as follows:

Heel Flap #1: (on an even number of stitches) Looks like ribbing

Row 1: RS Slip 1,* Knit 1, slip 1 purlwise* repeat to last stitch, knit 1

Row 2: WS Slip 1 * Purl to last stitch, knit 1

Heel Flap #2: (on an even number of stitches) Looks a bit fancier than above

Row 1: RS Slip 1, *Knit 1, yarn fwd, slip 1 purlwise, yarn back * repeat to last stitch, knit 1

Row 2: WS Slip 1 *Purl to last stitch, knit 1

Heel Flap #3: (on an odd number of stitches – increase one stitch in the middle of the heel flap stitches on the last row of the leg stitches). Very decorative and the one I use.

Requires a little more focus than the previous two.

Row 1: RS Slip 1, Knit 1, *with yarn forward slip 1 purlwise, yarn back, knit 1* repeat * to * to last stitch, knit 1

Row 2: WS Slip 1, Purl to last stitch, knit 1

Row 3: RS Slip 1,* with yarn in front slip 1 purlwise, yarn back, knit 1* repeat * to * to last 2 stitches, wyif slip 1 purlwise, yb, knit 1

Row 4: WS (As 2nd row)

These four rows form the pattern.

Decrease one stitch in the middle of the last purl row.

Heel Flap #4: At the beginning of every row, slip one stitch (as above and knit 2 or 3 stitches, then continue across the row with one of the patterns above to the last three or four stitches, knit to end.

Row 2: Slip 1 stitch, knit 2 or 3, purl across row to last 2 or 3 stitches, knit to end.

To turn the heel, knit across half the number of the heel flap stitches plus 2, slipping 1st stitch as before (e.g. 12 stitches for our example) ssk, knit 1, turn.

Next row (WS) (same for all sizes): slip 1, purl 5, purl 2 together, purl 1, turn.

Next row: Slip 1, knit across 6 stitches, ssk, knit 1, turn

Next row: Slip 1, purl across 7 stitches, purl 2 tog, purl 1, turn

Next row: Slip 1, knit across 8 stitches, ssk, knit 1, turn

Next row: Slip 1, purl across 9 stitches, purl 2 tog, purl 1, turn

Continue in short rows, working one more stitch on each row, *decreasing across the gap created*, until all the side stitches are used up.

Last row: (RS) Slip 1, knit across row.

You are now ready to pick up stitches along the heel flaps.

The number of gusset stitches picked up along each side of the heel flap should be the number of stitches in "chain" along the side of the heel flap (9 in our example) plus 1 stitch which is picked up in the corner between the heel flap and instep stitches. These corner stitches are knitted together, through the back of the loop, with first and last instep stitches *on the first round only*. (You may wish to knit the picked up heel flap stitches through the backs of the loops *on the first round only* – *this will make the join a little tighter*) Place markers between the heel flap stitches and the instep stitches. On the second round, begin to decrease gusset stitches by knitting (2 together, knit 1) before first marker and knitting (k1, ssk) after the second marker. Decrease in this manner every other round until the total number of stitches is the same as originally cast on. Continue knitting the foot. The length should be somewhere around the end of the little toe of the recipient. To fit properly, socks should be a little short. If you make them too long, the heel will not fit properly and the socks will be uncomfortable.

Toe # 1: Traditional Flat toe. Half the number of stitches on the needles and place markers. These markers will be in line with the sides of the foot. 3 stitches before first marker (should be at side of foot) knit 2 together, knit 1, slip marker, knit 1, ssk. Knit to 3 stitches before 2nd marker (should be at other side of foot) knit 2 together, knit 1, slip marker, knit 1, ssk. Finish round. Knit 1 round even. Continue to decrease in this manner every other round until approximately $\frac{1}{2}$ the stitches are left on the needles. Thereafter, decrease every round until there are about $\frac{1}{4}$ of the total number of foot stitches left. Kitchener stitch (grafting) or 3 needle cast off.

Toe #2: Star toe. Quarter stitches and place markers. Knit to 2 stitches before each marker and either knit 2 together or ssk. There will be 4 decreases in each round. Knit one round even. Continue to decrease four stitches every other round until there are 8 stitches between decreases, then decrease every round. Continue to decrease every round until 8 stitches remain all together. Break yarn and thread through stitches. Draw up firmly and secure. This method will give a slanting line of decreases across the foot.

If you are new to knitting socks, Toe #2 is a good option until you have more experience. There are all kinds of fancy toes, which are fun to try, but these two are the most common and work well.

Pam

Amended 09/18

For your file:

Personal pattern for

Cast on stitches

Ribbing of your choice forinches, usually 1x1 ribbing or 2 x 2 ribbing

Change to stocking stitch and workinches

Work the heel on half the number of stitches cast on

forrows, slipping the first stitch of every row to create a chain along both edges. See formula for choice of heels.

Knit across ½ the heel flap stitches plus 2 ssk, knit 1, turn

Slip 1, purl across 5 stitches, purl 2 together, purl 1, turn

Slip 1, knit across 6 stitches, ssk, knit 1, turn

Slip 1, purl across 7 stitches, purl 2 together, purl 1 turn

Slip 1, knit across 8 stitches, ssk, knit 1 turn

Slip 1, purl across 9 stitches, purl 2 together, purl 1 turn

Continue decreasing in this manner knitting (or purling) 1 stitch more and decreasing across the gap created on the previous row, until all the side stitches are used up.

Last row: slip 1, knit across row. (Note number of stitches left))

Place a marker, pick upstitches along the side of the heel flap, place a marker.

Pick up 1 stitch in the corner before knitting across the instep stitches, pick up 1 stitch at the end of the instep stitches, place a marker.

Pick upstitches along the second side of the heel flap, place a marker.

Knit a round, knitting the heel flap stitches (between the markers on each side) through the backs of the loops, and knitting the two picked up stitches in the corners, together with the first and last instep stitches. Remove the first and last markers, leaving the middle two markers on the needles.

On the 2nd round, knit to three stitches before the first marker, knit 2 together, knit 1

Knit across to the second marker, knit 1, ssk, knit to end of round.

3rd round: Knit even.

Decrease in this manner, every other row, until you have the same number of stitches you cast on (.....stitches)

Knit even forinches.

Work one of the toes as in the formula.