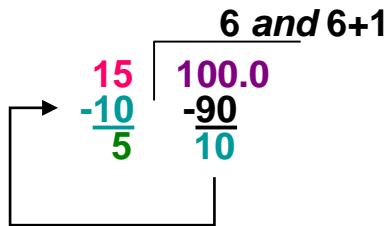


Calculating the Equal Spread of Increases and Decreases

15 increases over 100 sts



$$6 \times 5 = 30 \text{ sts}$$

$$6+1 = 7$$

$$7 \times 10 = 70 \text{ sts}$$

$$5 + 10 = 15 = \# \text{ of increases}$$

$$30 + 70 = 100 = \text{number of sts at start}$$

Increase every 6 sts x 5, and every 7 sts x 10

To work this, spread the different st counts out:

$$[(K7, m1) \times 2, k6, m1] \times 5 = 15 \text{ incs}$$

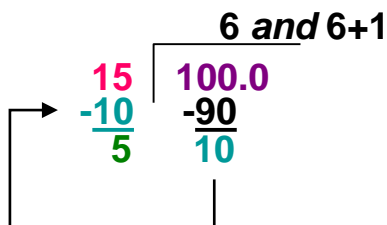
BUT, that would have a k7 at the beg and end with the m1...not good! So, move the sts a round a bit:

$$K3, [(m1, k7) \times 2, m1, k6] \times 4, (m1, k7) \times 2, m1, k3$$

The k3's add up to the last k6

NOTE: this assumes that you are using an inc that does not take a st to create (i.e. kf&b uses a st to do the inc, so numbers would change)

15 decreases over 100 sts



$$6 \times 5 = 30 \text{ sts}$$

$$6+1 = 7$$

$$7 \times 10 = 70 \text{ sts}$$

$$5 + 10 = 15 = \# \text{ of decreases}$$

$$30 + 70 = 100 = \text{number of sts at start}$$

Dec every 6 sts x 5, and every 7 sts x 10... realizing that every dec takes 2 sts to do

The numbers are the same but the action is different. Each dec takes 2 sts to do the action, so use 5 and 4 instead of 7 and 6.

To work this, spread the different st counts out:

$$[(K5, k2tog) \times 2, k4, k2tog] \times 5 = 15 \text{ decs}$$

BUT, that would have a k5 at the beg and end with the k2tog...not good! So, move the sts a round a bit:

$$K2, [(k2tog, k5) \times 2, k2tog, k4] \times 4, (k2tog, k5) \times 2, k2tog, k2$$

The k2's add up to the last k4

Example for Sleeve Increases:

Gauge = 5 sts and 7 rows per inch

Top width = 20" x 5 sts per inch = 100 sts

Hem width = 9" x 5 sts / in = 45 sts (round to 46 to be an even number—if total # of sts was an odd number, this would be kept an odd number)

Calculate decreases:

$$100 - 46 = 54$$

Divide by 2 = **27** PAIRS of increases = A

Length of sleeve = 20 inches x 7 rows / in = **140** rows for sleeve length = B

B divided by A = $140/27 \approx 5.2$ = # of rows between each dec

Must be a whole* number, so start with 5 and use calculation below

27 increases over 140 rows

$$\begin{array}{r} 27 \overline{) 140.0} \\ \underline{-5} \\ 22 \end{array}$$

5 and 5+1

$$5 \times 22 = 110 \text{ rows}$$

$$5+1 = 6$$

$$6 \times 5 = 30 \text{ rows}$$

$$22 + 5 = 27 = \# \text{ of increases}$$

$$110 + 30 = 140 = \text{number of rows}$$

Note: It is preferred to do increases on an **even** row count so they are always done on the **right side**. For the example above, I would estimate with every 4 & every 6 rows as follows:

$$\begin{array}{l} 4 \times 12 = 48 \\ 6 \times 15 = 90 \end{array}$$

Equals 27 incs over 138 rows, working the additional 2 rows plain. You can play with the numbers and come up with many different combinations that come close to 140 rows.