Short rows are a very useful knitting tool. When you work a short row, all you are doing is stopping before you get to the end of the row and turning your work to the other side.

**METHOD 1: WRAP & TURN (W&T)**

**On a knit row:**

Work to last stitch before wrap, slip next stitch to right needle, pass yarn from back to front, slip stitch back to left needle.

Turn to work purl row, passing yarn to front of work. When you work the next stitch, take care to pull yarn snugly.

**On purl row:**

Work to last stitch before wrap, slip next stitch to right needle, pass yarn from front to back, slip stitch back to left needle.

Turn to work knit row, passing yarn to back of work.

When you come to a wrapped stitch in subsequent rows, use one of the following methods:

**Standard method:**

For knit stitches: Lift the wrap with the right needle from the front, lift it over the stitch (it will be completely detached) place it on the left needle and work it together with the stitch it wrapped.

For purl stitches: Lift the wrap with right needle from the right-side of the work and place on the left needle. Work together with the stitch that was wrapped.

**My variation:**

I detach the wrap from the stitch and place it behind the stitch to be worked so that it is completely hidden.

**For knit stitches:** Using right needle, lift the wrap from the bottom at the front and with the stitch it wraps slip both stitches onto right needle. Slip both stitches knit wise to left needle and lift wrap over stitch it is wrapping. Knit wrap and stitch together.

**For purl stitches:** From front of work, with right needle lift wrap from bottom to top and sit on left needle. Lift wrap over first stitch on left needle, purl stitch and wrap together.
METHOD 2: JAPANESE SHORT ROWS

On a knit row:
Knit to the turning point, turn work. Slip stitch purl-wise and attach pin to working yarn (will hang on wrong side of work).

On a purl row:
Purl to turning point, turn work.

Slip stitch purl-wise, attach pin to working yarn (will hang on wrong side of work).

When you come to pin in subsequent rows:

For knit stitches:
Work to gap, pin is attached to loop behind right needle.

Pull pin to place yarn loop on left needle (and remove the pin).

Knit loop and next stitch together.

For purl stitches:
Purl to gap, pin will be attached to loop under right needle.

Slip next stitch purl-wise from left to right needle. Pull pin to place yarn loop on left needle and remove pin.

Slip stitch from right to left needle.

Purl stitch together with loop.

METHOD 3: YARN OVER SHORT ROW

On a knit row:
Knit to turning point, turn work to purl side. Bring yarn to back of work, begin working purl row. As the yarn is brought to front of work to work purl row you will create a yarn over loop in front of the first stitch.

On purl row:
Purl to turning point, turn work to knit side. Bring yarn to front of work, begin working knit row. As the yarn is brought to back of work to work knit row you will create a yarn over loop in front of the first stitch.

When you come to a wrapped stitch in subsequent rows:
For knit stitches: Work to ‘double stitch’, the second stitch of this is the yarn over that you will use to close the gap. Knit stitch, remount yarn over, knit two together.

For purl stitches: Work to ‘double stitch’, the second stitch of this is the yarn over that you will use to close the gap. Purl stitch, slip 1 stitch knit-wise, slip 1 stitch knit-wise. Move these 2 stitches back to left-hand needle, purl two together through back loop (this is a slip slip purl).

SAMPLE SHORT ROW SWATCH

Each time you turn your work you will work a short row. Use this swatch to work through all 4 short row methods in turn.

- Purl 4 sts, turn
- Knit 8 sts, turn
- Purl 12 sts, turn
- Knit 16 sts, turn
- Purl 20 sts, turn
- Knit 24 sts, turn

Cast on 28 sts
SHOULDER SHAPING

If you are working shoulders by using ‘stair steps’ decreases to slope them, you can replace these decreases with short rows instead. This creates a smooth finish and you can use a three-needle bind off to finish.

<table>
<thead>
<tr>
<th>LEGEND</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BO</td>
<td>bind off (cast off)</td>
</tr>
<tr>
<td>CO</td>
<td>cast on</td>
</tr>
<tr>
<td>dec</td>
<td>decrease</td>
</tr>
<tr>
<td>k</td>
<td>knit</td>
</tr>
<tr>
<td>k2tog</td>
<td>knit 2 stitches together</td>
</tr>
<tr>
<td>p</td>
<td>purl</td>
</tr>
<tr>
<td>RS</td>
<td>right side(s)</td>
</tr>
<tr>
<td>Ssk</td>
<td>slip 2 sts one at a time as though to knit; knit both together</td>
</tr>
<tr>
<td>Ssp</td>
<td>slip 2 stitches individually as if to knit; then purl those 2 stitches together through the back loops</td>
</tr>
<tr>
<td>St</td>
<td>stitch</td>
</tr>
<tr>
<td>St st</td>
<td>stockinette stitch (stocking stitch)</td>
</tr>
<tr>
<td>W&amp;t</td>
<td>wrap &amp; turn</td>
</tr>
<tr>
<td>WS</td>
<td>wrong side</td>
</tr>
</tbody>
</table>
Swatch Pattern

You may use the yarn and needle of your choice. For the sample shown in the class I have used aran weight yarn with US size 8 / 5 mm needles. We will work a small swatch of the armhole and back with short row shoulder shaping. Then we will work one half of a cardigan ‘front’ that we will attach together.

This armhole and shoulder will be used below to demonstrate our short row set in sleeve.

Back Swatch

CO 34 sts. Work 4 rows in garter stitch. Work in st st for 4 rows, ending with a WS row.

BO Row (RS): BO 2 sts, work to end of row. 32 sts.

Next Row (WS): Purl.

Dec Row (RS): K1, ssk, knit to end of row. 31 sts.

Dec Row (WS): Purl to last 3 sts, ssp, p1. 30 sts.

Work Dec Row RS only 2 more times. 28 sts.

Work even in st st for 19 more rows, ending with a WS row.

Short Rows Shoulder Shaping

Next Row (RS & all RS): Knit.

Short Row 1 (WS): Purl to last 4 sts, w&t.

Short Row 2 (WS): Purl to last 8 sts, w&t.

Short Row 3 (WS): Purl to last 12 sts, w&t.

Knit to end of row.

Purl 1 more row, picking up all wraps as you pass them.

Front Swatch

CO 22 sts. Work 4 rows in garter stitch. Work in st st for 5 rows, ending with a RS row.

BO Row (WS): BO 2, purl to end of row. 20 sts.

Dec Row (RS): Knit to last 3 sts, k2tog, k1. 19 sts.

Dec Row (WS): P1, p2tog, purl to end of row. 18 sts.

Work Dec Row RS only 2 more times. 16 sts.

Work even in st st for 19 more rows ending with a WS row.

Short Row Shoulder Shaping

Short Row 1 (RS): Knit to last 4 sts, w&t.

Next Row (WS & all WS): Purl.

Short Row 2 (RS): Knit to last 8 sts, w&t.

Short Row 3 (RS): Knit to last 12 sts, w&t.

Purl to end of row.

Knit 1 more row picking up all wraps as you pass them. Work 1 more WS row
Set-in sleeves can be worked from the top down using short rows. Pick up sleeve stitches (number needed for top of sleeve) around armhole starting at center of bottom of armhole.

Mark top 1/3 of stitches. Work to end of top third (2/3 of total stitches), w&t.

Work top 1/3 stitches, w&t.

Now you continue to work to wrapped st, work st, then wrap next stitch, working back and forth on each side.

Stop working short rows when underarm stitches are reached.
Set In Sleeve Swatch

We will pick up 30 stitches evenly around the armhole from the previous swatch.

Work short row shoulder shaping as shown in the diagram. You can see that there will be 10 central stitches at the top of the shoulder with short rows worked on either side.

Short Row Set In Sleeve Cap Example

1 underarm st left unwrapped each end.

10 %0A

End
For anyone larger than a B cup you may find that the front of your jumpers/cardigans seems shorter. Extra length can be added at the chest by using short rows.

Measure the difference in length between your side and front and add the extra length with short rows.

Begin your short rows a little in from the side and stop just outside your nipple (approx 1"/2.5cm out each side). The number of stitches in each row will depend on the number of rows and on your gauge.

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Gauge
Stitches per 1 Inch  _______
Rows per 1 Inch  _______
Number of Short Rows needed:

A. Length from shoulder to waist at side seam = _________ Inches.
B. Length from shoulder to waist over bust = _________ Inches.
C. B-A = _________ Inches
D. C x Rows per Inch = ________ Rows.
Note that every time we work a short row it takes up two rows, forwards and back.
E. D/2 = _________ turns each side.
This is the number of ‘turns’ we have at each side of our bust.

Number of Stitches each side for Short Rows:

F. Side seam to side seam = _________ Inches.
G. Nipple to nipple = _________ Inches.
Note that we start the short rows at least 1 inch outside this point on each side.
H. (F-G-1-1)/2 = _________ Inches each side of body to work short rows.
I. H x Stitches per Inch = _________ stitches.
This is the number of stitches we have each side to work our short rows.
J. I /E = _________ stitches between each turn.
So we will work E short rows on each side every J stitches.

Note that if your numbers comes out uneven, you can vary the rate that the short rows that are worked at as well as adding extra stitches at the side seam or each side of the nipple to ensure it comes out even.

Also note that the short rows do not begin exactly at the side seam, they begin at least J stitches inside the side seam plus any extra stitches needed to create an even stitch count for your short rows.

End