

Lesson 2: Further problems

Resource 2.3

Further problems or homework

- 1** At 2:00 pm on the third day, Del sees he is running out of T-shirts. He wants his assistants to make 1350 more T-shirts by 7:00 pm. They will obviously get tired with so much sewing to do. So Del says that in each hour they can make 60 fewer T-shirts than the hour before.
- a** How many T-shirts must Del's assistants make in each hour up to 7:00 pm?
 - b** If they went on making 60 fewer T-shirts in each hour after 7:00 pm, what is the maximum number of T-shirts they could make and by what time?

- 2** A small T-shirt can be made from a rectangle of jersey fabric 1 metre long and half a metre wide.
- You have a piece of jersey fabric 1 metre wide and 2 metres long. In how many different ways can you cut out the rectangles to make T-shirts?

What if your piece of fabric is 1 metre wide and 2.5 metres long?
3 metres long?

3.5 metres long?

Record your answers in the table below.

See if you can find a rule for calculating the number of different ways to do this with longer pieces of fabric.

Length of fabric 1 metre wide	0.5 m	1 m	1.5 m	2 m	2.5 m	3 m	3.5 m
Number of ways to cut out rectangles							

