

## Solution

First pupils need to work out how many tiles Serena needs to go across the back of the sink.

They know that one tile will not be wide enough, so they add another tile.

$$300 \text{ mm} + 300 \text{ mm} = 600 \text{ mm} \text{ (or } 300 \text{ mm} \times 2 = 600 \text{ mm)}$$

They check to see if 600 mm is wider than 570 mm (width of the sink).

They subtract 570 from (or add up to) 600 to find that **2 tiles are 30 mm wider than the sink.**

Pupils recognise that 30 mm is less than 50 mm and that Serena will be happy with this much tile extending either side of the sink.

Or, they may divide 30 mm by 2 to find that the tiles can equally extend 15 mm either side of the sink – which is less than 50 mm.

As only a depth of one tile is needed above the sink, pupils should correctly decide that only 2 tiles are needed for the project.

**The total cost of the tiles is  $\text{£}4.95 \times 2 = \text{£}9.90$**

Pupils can use whichever method they wish to find the total cost:

- they may choose to add ( $\text{£}4.95 + \text{£}4.95 = \text{£}9.90$ ); or
- they may choose to double  $\text{£}5$  to get  $\text{£}10$  and then subtract 10p to get  $\text{£}9.90$ .

