



Work out

$$1\frac{1}{5} \div 3\frac{7}{10}$$

$$\frac{6}{5} \div \frac{37}{10}$$

$$\frac{6}{5} \times \frac{10}{37}$$

$$\frac{60}{185}$$

$$\frac{12}{37}$$

Find the volume of a cylinder with diameter 8cm and height 20cm.

$$\pi \times 4^2 \times 20$$

$$= 1005.3 \text{ cm}^3$$

A line has equation  $y = -x + 8$

Write down the gradient of the line

-1

Write down the coordinates of the y-intercept of the line

(0, 8)



Pattern 1

1



Pattern 2

7

+6



Pattern 3

19

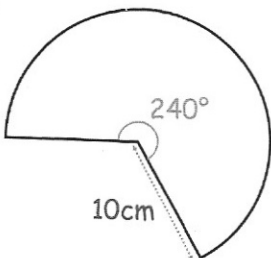
+12

+18

37

Here is a sequence of patterns made from these tiles.

How many of these tiles are needed to make Pattern number 4?



Calculate the perimeter of the sector.

$$\frac{240}{360} \times \pi \times 20 = 41.88\dots$$

$$41.88\dots + 20 = 61.9 \text{ cm}$$

to 1dp