



$\frac{8}{101}, \frac{9}{91}, \frac{10}{81}, \frac{11}{71} \dots$

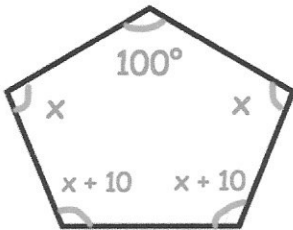
$-10n$

$101 \quad 91 \quad 81 \quad \dots$
 $-10 \quad -20 \quad -30 \quad \dots \quad -10n + 111$

Find the nth term

$n \quad 8 \quad 9 \quad 10 \quad 11$
 $1 \quad 2 \quad 3 \quad 4$ $n+7$

$\frac{n+7}{111-10n}$



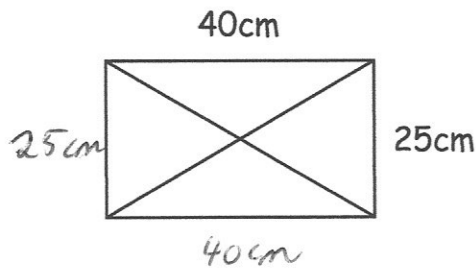
Find x

$4x + 120 = 540$
 $4x = 420$
 $x = 105^\circ$

Shown is a rectangular metal frame with two diagonal supports.

What length of metal is used?

$25^2 + 40^2 = d^2$
 $d = 47.1699 \text{ cm}$
 $40 + 40 + 25 + 25 + 47.1699 =$



$47.1699 = 224.34 \text{ cm}$

The mass of Earth is 5.97×10^{24} kg

The mass of Jupiter is 1.898×10^{27} kg

$\frac{1.898 \times 10^{27}}{5.97 \times 10^{24}} = 317.9$

Work out how many times heavier Jupiter is than Earth.
 Give your answer to one decimal place.

A line has equation $y = -4x$

Write down the gradient of the line

-4

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

$(0, 0)$