



The first two terms of a geometric progression are

$$6 \quad 42$$

$\xrightarrow{\times 7}$        $\xrightarrow{\times 7}$

Write down the third term.

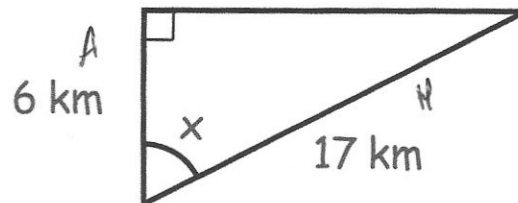
$$42 \div 6 = 7$$

$$42 \times 7 = \underline{\underline{294}}$$

Calculate the size of angle x.

$$\cos x = \frac{6}{17}$$

$$\cos^{-1} \frac{6}{17} = 69.33^\circ$$



A regular polygon has 30 sides.

Calculate the size of each interior angle.

$$360 \div 30 = 12^\circ$$

$$180 - 12 = 168^\circ$$

$$168^\circ$$

Solve the simultaneous equations

$$6x + 3y = 45 \quad \times 2$$

$$2x - 2y = 12 \quad \times 3$$

$$14 - 2y = 12$$

$$12x + 6y = 90$$

$$6x - 6y = 36 \quad \text{add}$$

$$\underline{18x = 126}$$

$$x = 7$$

$$y = 1$$

Write  $1000 \times (10^4)^2$  in the form  $10^x$

$$10^3 \times 10^8$$

$$10^{11}$$