

April 23rd

5-a-day

Numeracy

$$5p + 7s + 4p - 3s$$

$$9p + 4s$$

$$f \times f \times f \times f$$

$$f^4$$

$$2^3$$

$$8$$

$$-2 \times -4$$

$$8$$

$$0.8 \times 0.2$$

$$0.16$$

Solve

$$\frac{x}{3} = 6$$

$$x = 18$$

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Foundation

Simplify

$$x^5 \times x^{-2}$$

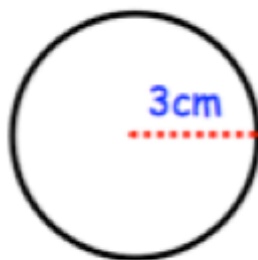
$$x^3$$

Simplify

$$y^5 \div y^{-2}$$

$$y^7$$

Calculate the circumference



$$\begin{aligned} &\pi \times d \\ &\pi \times 6 \\ &= 18.85 \text{ cm (2dp)} \end{aligned}$$

A car travels for 7 hours at 30 miles per hour, then for 3 hours at 40 miles per hour.

What is the total distance travelled?

$$330 \text{ miles}$$

$$d = s \times t$$

$$\begin{aligned} 7 \times 30 &= 210 \text{ miles} \\ 3 \times 40 &= 120 \text{ miles} \end{aligned}$$

What is the average speed for the whole journey?

$$330 \div 10 = 33 \text{ mph}$$

$$s = d \div t$$

What number has no reciprocal?

0

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Higher

Write down the value of:

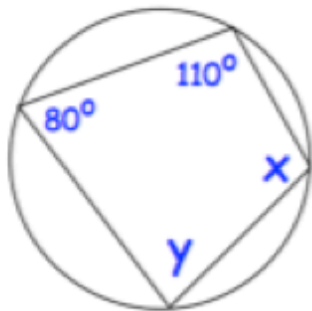
$27^{2/3}$

$(\sqrt[3]{27})^2$   
 $3^2 = 9$

Write down the value of:

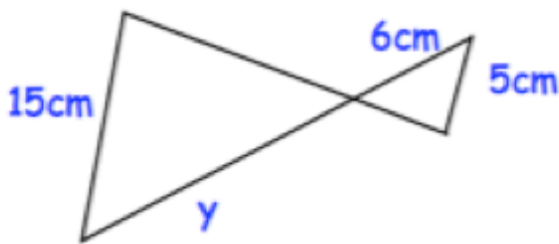
$8^{-2}$

$\frac{1}{8^2} = \frac{1}{64}$



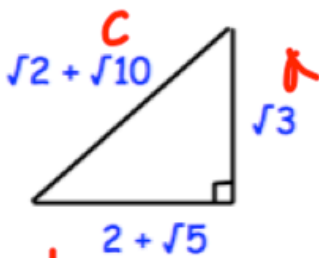
$x = 100^\circ$

$y = 70^\circ$



Find y

$18\text{cm}$



Prove this triangle is right-angled

$a^2 + b^2 = c^2$   
 $(\sqrt{3})^2 + (2 + \sqrt{5})^2 = (\sqrt{2} + \sqrt{10})^2$

$(\sqrt{3})^2 + (2 + \sqrt{5})(2 + \sqrt{5}) = (\sqrt{2} + \sqrt{10})(\sqrt{2} + \sqrt{10})$   
 $3 + 4 + 4\sqrt{5} + 5 = 2 + \sqrt{20} + \sqrt{20} + 10$   
 $12 + 4\sqrt{5} = 12 + 2\sqrt{20}$   
 $12 + 4\sqrt{5} = 12 + (2 \times \sqrt{4} \times \sqrt{5})$   
 $12 + 4\sqrt{5} = 12 + 4\sqrt{5}$   
 QED