

M3 = 26 days to go!

6 John has a telephone with the following costs.

Line rental: £18.99 per month
Call charge: 5.8p per minute

Each month

each minute

Last month John made calls lasting 385 minutes.

Work out his telephone bill for last month.

$$\begin{aligned} 385 \times 5.8 \text{ pence} \\ 2233 \text{ pence} \\ = \pounds 22.33 \end{aligned}$$

$$\begin{array}{r} 18.99 \\ + 22.33 \\ \hline 41.32 \end{array}$$

check it is sensible



Answer £ 41.32 [3]

17 At a concert 40% of the audience are children.

One third of the rest of the audience are men.

There are 120 women in the audience.

Work out the total number of people in the audience.

40%	60%
children	adults

$\frac{1}{3}$ of 60% is men so men = 20%

women = 40%

But 40% = 120

10% = 30

100% = 300

Answer 300 [3]

add to
-6
23 Factorise $y^2 - 6y + 8$

multiply to +8

FACTORISE
FACTORIES MAKE BRACKETS

-4×-2

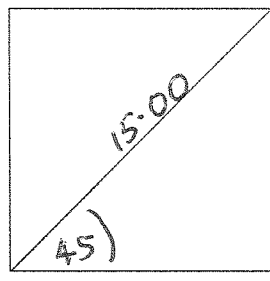
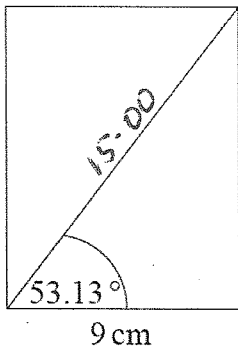
$(y-4)(y-2)$

Answer _____ [2]

check by using claw

24 A rectangle and a square have the same length of diagonal.

Trigonometry.

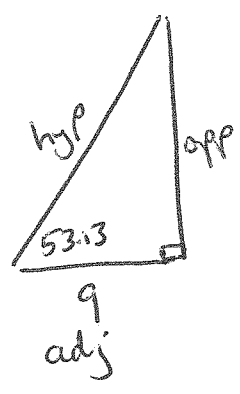


diagrams not drawn accurately

S O H A C H O T A

Calculate the length of the side of the square.

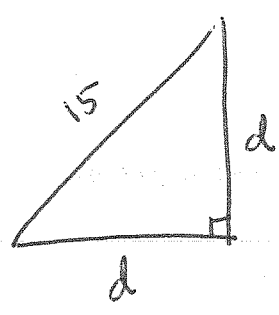
Give your answer correct to 1 decimal place.



C A H

$\cos 53.13 = \frac{9}{\text{hyp}}$

$\text{hyp} = 15.00$



$d^2 + d^2 = 15^2$

$2d^2 = 225$

$d^2 = 112.5$

$d = \sqrt{112.5}$

$d = 10.61$

Answer 10.61 cm [6]