

# m3 = 13 days to go!

5 (a) What percentage is £35.25 of £47?

$$\frac{35.25}{47} \times 100 = 75.5\% \text{ (1 d.p.)}$$

Answer 76 % [2] (nearest %)

(b) John bought a new phone for £44 plus 17.5% VAT.

Mark bought a similar phone in a different shop.

Mark paid £50.31 including VAT at 17.5%

Whose phone was more expensive and by how much?

Show all your working.

$$44 + 17\frac{1}{2}\% \text{ VAT}$$

$$44 + 7.70$$

£51.70  
John

$$17\frac{1}{2}\% \text{ of } 44$$
$$0.175 \times 44$$
$$7.70$$

Mark £50.31

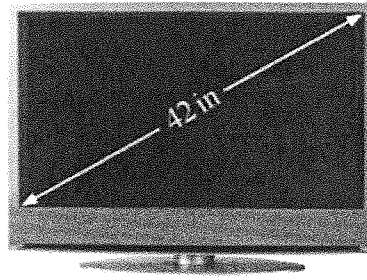
Answer John by £ 1.39 [3]

14 The size of a television is given as the length of the diagonal of the screen.

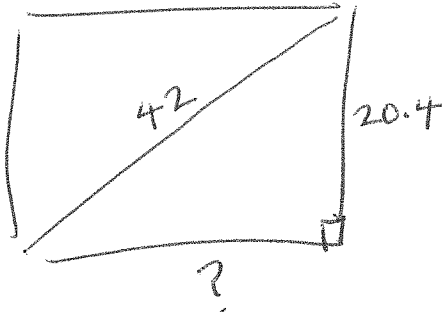
This television has a size of 42 inches.

The height of the screen is 20.4 inches.

What is the width of the screen?



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Pythagoras'

$$42^2 - 20.4^2 = ?^2$$

$$1347.84 = ?^2$$

$$\sqrt{1347.84}$$

$$36.7$$

Answer 36.7 inches [3]

appropriate accuracy

25 The population of a town in 2014 was 80058

This was a 65% increase on its population in 1994

What was the population in 1994?

$$? + 65\% = 80058$$

$$165\% = 80058$$

Answer 48520 [3]

$$1\% = 485.2$$

$$100\% = 48520$$