

January 30th

5-a-day

Numeracy

Work out 5^2

25

Add together 93, 29 and 102

$$\begin{array}{r} 93 \\ 29 \\ \hline 1402 \\ 224 \end{array}$$

What number is halfway between 8 and 13

$$8 + 13 = 21$$

$$\frac{1}{2}(21) = 10.5$$

Mary thinks of a number.

She doubles it.

She then adds six.

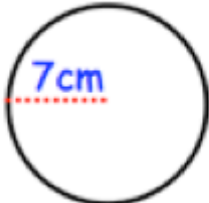
Her answer is 32

What was her number?

$$32 - 6 = 26$$

$$26 \div 2 = 13$$

	French	German	Spanish	Total
Female	9	7	7	23
Male	5	2	10	17
Total	14	9	17	40

January 30	5-a-day	Foundation
<p>Calculate the circumference of this circle.</p> 		$\pi \times 14$ $= 43.98 \text{ cm}$ <p>or $14\pi \text{ cm}$</p>
<p>Work out $3a + 2c$ when $a = 4$ and $c = -2$</p> $3 \times 4 + 2 \times -2$ $12 + (-4)$		8
<p>A ten sided dice, numbered 1 to 10 is rolled.</p> <p>What is the probability of a 3?</p> $\frac{1}{10}$		<p>What is the probability of a number less than 4?</p> $\frac{3}{10}$ <p>What is the probability of a square number?</p> $1 \quad 4 \quad 9$ $\frac{3}{10}$
<p>A car travels 100 miles in 4 hours.</p> <p>What is its average speed?</p> $s \quad d$ $+$		$\frac{100}{4} = 25 \text{ mph}$
<p>Simplify</p> $5(x + 3) + 2x - 4$ $5x + 15 + 2x - 4$		$7x + 11$

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Higher

Write 32000000000 in standard form.

$$3.2 \times 10^{10}$$

Write 3.5×10^3 as an ordinary number

$$3500$$

A barrel weighs 400kg to the nearest 10kg.

$$405 \text{ kg}$$

A lorry can hold 4 tonnes to the nearest 100kg.

$$4000 \text{ kg}$$

$$3950 \text{ kg}$$

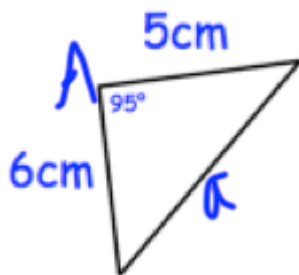
How many barrels can be safely transported?

to ensure safety $\frac{\text{min}}{\text{max}}$

$$3950 \div 405 = 9.753...$$

9 barrels

Calculate the area.



$$\frac{1}{2} ab \sin C$$

$$\frac{1}{2} \times 6 \times 5 \times \sin 95$$

$$15 \times \sin 95$$

$$14.943 \text{ cm}^2$$

Find distance AB.

$$a^2 = b^2 + c^2 - 2bc \cos A$$

$$a^2 = 61 - 60 \cos 95$$

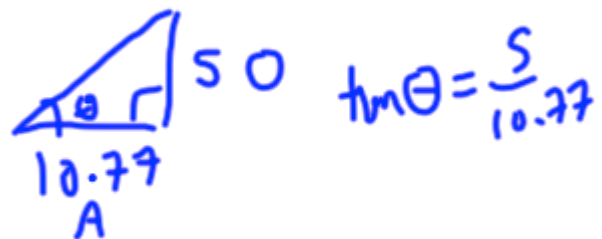
$$a^2 = 66.22934...$$

$$a = 8.138 \text{ cm}$$

Find angle ABC.

$$AB^2 = 4^2 + 10^2 = 116$$

$$AB = 10.77 \text{ cm}$$



$$\theta = 24.9^\circ$$

