

Name:

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Target 5 GCSE Set 1 Paper 1



	Q	Topic	My Mark	Max Marks
Non Calculator	1	HCF and LCM		5
	2	Rounding, estimation and error intervals		5
	3	Standard form		5
	4	Angles with algebra		5
	5	Factorising and expanding quadratics		5
	6	Linear and Simultaneous equations		6
Calculator	7	Reverse percentages		3
	8	Pythagoras' Theorem and Trigonometry		7
	9	Direct and inverse proportion		6
	10	Speed Distance Time		7
				54

A Jagger

Question 1 - Highest Common Factor and Lowest Common Multiple

(a) Find the Highest Common Factor of 70 and 126.

.....
[3]

(b) Work out the Lowest Common Multiple of 70 and 126.

.....
[2]

Question 2 - Rounding, estimation and error intervals

(a) Estimate the value of

$$\frac{24.9 \times 4.46}{0.195}$$

.....
[3]

(b) The number of rugby supporters at a match is 498000 correct to the nearest 1000. Write down the error interval for the number of supporters at the match.

$$\dots \leq n < \dots$$

[2]

Question 3 - Standard form

(a) Write 645×10^{-1} in correct standard form notation

.....
[1]

(b) Work out $(5.2 \times 10^{-5}) \div (2.6 \times 10^3)$.
Write your answer in standard form.

.....
[2]

(c) Work out $(7.8 \times 10^9) + (5 \times 10^7)$. Write your answer in standard form.

.....
[2]

Question 4 - Angles with algebra

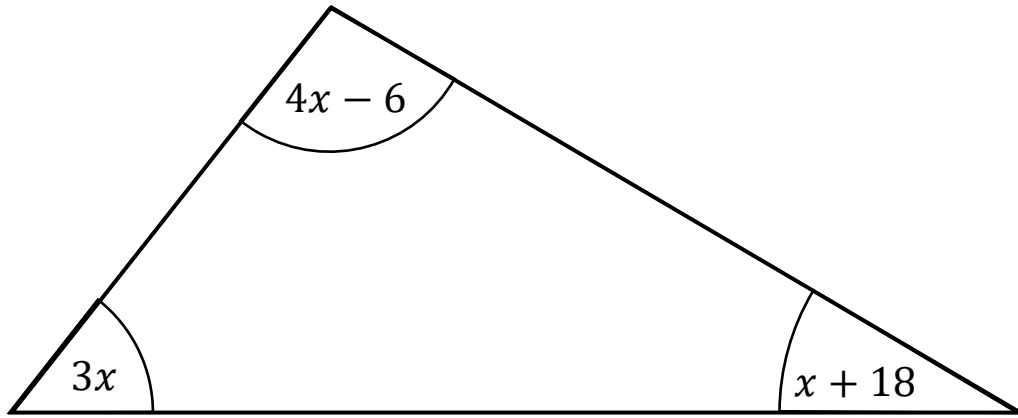


Diagram NOT drawn accurately

Find the size of each of the three angles.

Question 5 - Factorising and expanding quadratics

(a) Expand $(x - 5)(x - 9)$

.....
[2]

(b) Factorise $x^2 + x - 6$

.....
[2]

(c) Use your answer to (b) to solve $x^2 + x - 6 = 0$

$x = \dots\dots\dots$ or $x = \dots\dots\dots$
[1]

Question 6 - Linear and Simultaneous equations

(a) Solve $\frac{x}{3} + 7 = -2$

$x = \dots\dots\dots$
[2]

(b) Solve the simultaneous equations

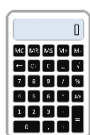
$$4x + 5y = 38$$

$$5x + 3y = 28$$

$x = \dots\dots\dots$

$y = \dots\dots\dots$

[4]



Calculator

Question 7 - Reverse percentages

A camera costs £180 in a 10% off sale. What was the pre-sale price?

.....

[3]

Question 8 - Pythagoras' Theorem and Trigonometry

(a) Calculate the length of the side BC to 2 decimal places.

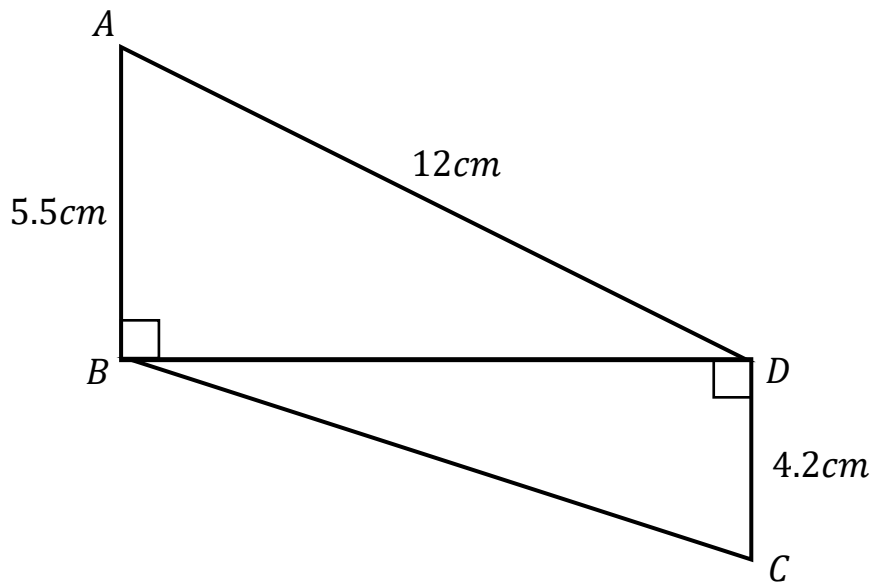


Diagram NOT drawn accurately

BC = cm
[4]

(b) Calculate the size of the angle marked x .
Give your answer to 3 significant figures.

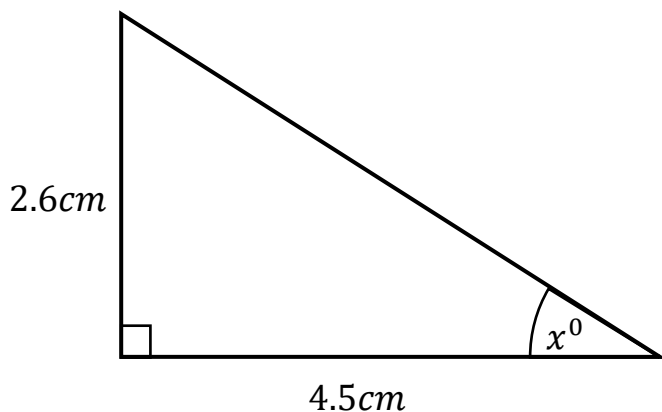


Diagram NOT drawn accurately

$x = \dots\dots\dots^{\circ}$
[3]

Question 9 - Direct and Inverse Proportion

P is inversely proportional to M.

When $P = 48$, $M = 9$

(a) Write a formula for P in terms of M.

.....
[3]

(b) Calculate the value of P when $M = 12$

$P =$
[1]

(c) Calculate the value of M when $P = 216$

$M =$
[2]

Question 10 - Speed Distance Time

- (a) A lorry travels for 4 hours 45 minutes and covers a distance of 228 kilometres.
Work out the average speed of the lorry.

.....km/h
[3]

- (b) Oscar travelled 30miles in 1.5 hours.
Jess travelled 42miles in 2 hours.
Who had the greater average speed? You must show your working.

.....
[4]