

NAME	
TEACHER	

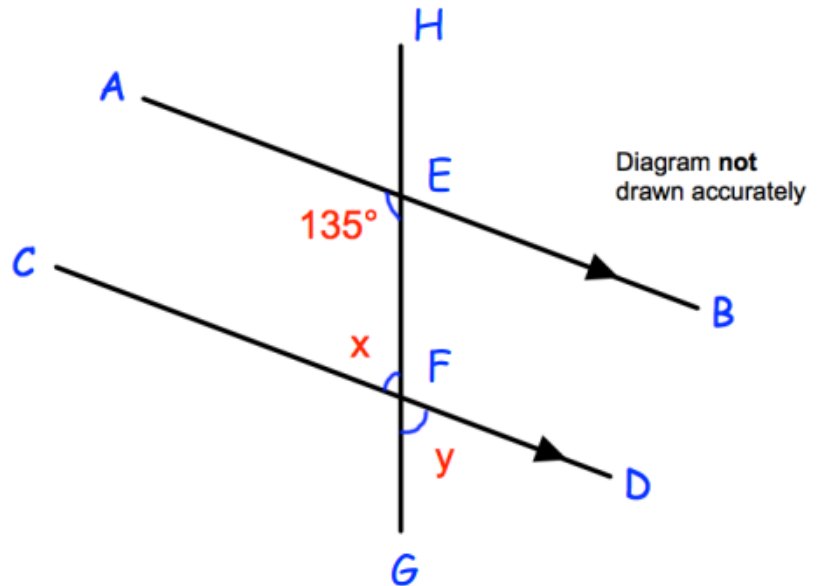
Year 9 Mathematics  
End of Year Assessment 2025

Paper 2  
CALCULATOR

60 minutes  
57 marks

Show all your working next to the question

- 1 In the diagram  
AB is parallel to CD.



- (a)(i) Work out the size of the angle marked x.

Answer: \_\_\_\_\_°

- (ii) Give a reason for your answer:

.....

- (b)(i) Write down the value of y

Answer: \_\_\_\_\_°

- (ii) Give a reason for your answer:

.....

(4 marks)

- 2 Convert these numbers to standard form:

- (a) 237000

Answer: \_\_\_\_\_

- (b)  $48.7 \times 10^6$

Answer: \_\_\_\_\_

(2 marks)

3 Convert the recurring decimal  $0.3\dot{2}$  to a simplified fraction

Answer: \_\_\_\_\_

(4 marks)

4

- (a) Fiona leaves £1600 in the bank for five years.  
It earns compound interest of 4% each year.

Calculate the total amount Fiona has in the bank at the end of the five years.  
Round your answer to the nearest pound.

Answer: £ \_\_\_\_\_

- (b) In a sale the price of a sofa is reduced by 28%. The sale price is £360.  
Work out the price before the sale.

Answer: £ \_\_\_\_\_

(6 marks)

5 Sara drives for 2 hours 15 minutes at an average speed of 36 mph. How far does she drive?

Answer: \_\_\_\_\_ miles

(2 marks)

6 Find an **estimate** for this calculation (show your method):

$$\frac{589.6}{2.9 + 7.01}$$

Answer: \_\_\_\_\_

(2 marks)

7 Isaac and Victoria share money in the ratio 2:5  
Victoria receives £6.60  
Work out the difference between how much money Isaac and Victoria receive.

Answer: £ \_\_\_\_\_

(3 marks)

8 Simplify the ratio:  $3.25 \times 10^{-3} : 4.2 \times 10^{-2}$

Answer: \_\_\_\_\_ : \_\_\_\_\_

(2 marks)

9 The length of a rectangle is 20 cm and the width of the rectangle is 6cm.  
Both measurements are correct to the nearest centimetre.

(a) Write down the minimum possible **width** of the rectangle.

Answer: \_\_\_\_\_ cm

(b) Write the error interval for the area of the rectangle, A:

Answer: \_\_\_\_\_  $\leq A <$  \_\_\_\_\_

(4 marks)

10 Convert 65mph to metres per second

You may use the fact that 1 mile  $\approx$  1.6 km

Round your answer to 1 decimal place.

Answer: \_\_\_\_\_ m/s

(3 marks)

11 The table shows information about netballers in a squad.

Age, $y$ years	Frequency
$16 < y \leq 20$	6
$20 < y \leq 24$	10
$24 < y \leq 28$	11
$28 < y \leq 36$	17

Work out an estimate for the mean age in the squad.  
Round your answer to 1 decimal place.

Answer: \_\_\_\_\_

(4 marks)

12

- (a) A train starts from rest and accelerates at  $0.2\text{m/s}^2$  for one minute.

Use the formula  $v = u + at$  to calculate the velocity of the train after one minute.

Answer: \_\_\_\_\_ m/s

- (b) Given that  $v = 20\text{m/s}$ ,  $a = 7\text{ m/s}^2$  and  $s = 26\text{m}$ , use the formula  $v^2 = u^2 + 2as$  to find the value of  $u$ .  
Give the correct units.

Answer: \_\_\_\_\_

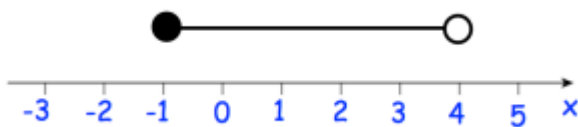
(5 marks)

13

- (a) Solve the inequality  $3(x - 4) \leq 16$

Answer: \_\_\_\_\_

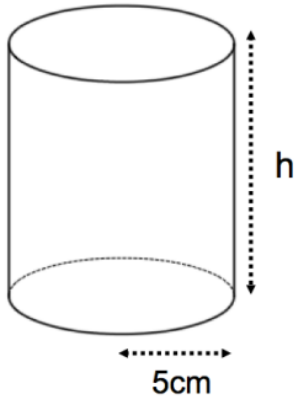
- (b) Write down the inequality shown by the diagram:



Answer: \_\_\_\_\_

(3 marks)

- 14 The surface area of the cylinder is  $170\pi \text{ cm}^2$   
Calculate the height of the cylinder



Answer: \_\_\_\_\_ cm

(4 marks)

- 15 The 15m arm of a crane is horizontal before it lifts its load from the ground to a point 9.4m vertically above the ground. What is the angle of elevation through which the load has been lifted? Give your answer to 1 decimal place.

Answer: \_\_\_\_\_ °

(4 marks)

- 16 60% of the people in a town are males.  
20% of the males are left-handed.  
21.6% of all the people are left-handed.

Work out the percentage of the people who are not male who are left-handed.

Answer : \_\_\_\_\_%  
(5 marks)

**END OF TEST**