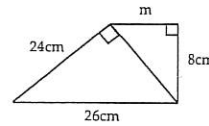


1. Calculate the length of the side marked m



A _____

2. Write down the n^{th} term in the sequence 12, 10, 8, 6, ...

B _____

3. Solve the equation $x^2 = 4 + 3x$

A _____

4. The mean of the numbers 3, 7, 0, x , 6 is 4. Calculate x .

B _____

5. Solve the inequality $7 - x > 9$

C _____

6. Two shapes are similar. Shape A is 3 times longer than shape B. If shape B has an area of 5cm^2 , what is the area of shape A?

B _____

7. Write 0.0076 in standard form

C _____

8. Solve the equation $2^x = 64$

C _____

9. Write 3^{-1} as a fraction

C _____

10. Write down the reciprocal of $\frac{1}{5}$

C _____

11. Solve the equation $\frac{3x-1}{4} = \frac{2}{5}$

A _____

12. The marks obtained by Class 11S are shown in this table:

Mark	5	6	7	8	9	10
Frequency	3	4	7	6	4	2

- (a) Find the mean mark

B _____

- (b) Find the mode of the marks

C _____

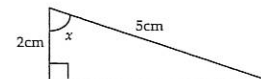
- (c) Find the median mark

C _____

13. Two similar cylinders have heights 8cm and 4cm. The volume of the large cylinder is 80cm^3 . What is the volume of the small cylinder?

A _____

14. Calculate the angle marked x to 3 significant figures



B _____

15. $S = ut - at^2$. Work out S when $u = 30$, $t = 5$ and $a = -2$. B _____
16. The road sign at Havant says Chichester is 12 miles. This is correct to the nearest mile. Write down the least distance between Havant and Chichester. C _____
17. By rounding each number appropriately, estimate the answer to $(0.51 \times 31) \div 2.9$. C _____
18. In triangle ABC, with the usual notation, $b = 10$ and $c = 8$ and angle $A = 22^\circ$. Find the length of a to 3 significant figures. A _____
19. Make x the subject of the equation $mx^2 - n = q$. A* _____
20. Factorise $9m^2 - 25k^2$. B _____
21. What is the equation of the straight line shown below? B _____

