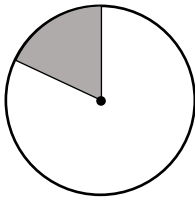


 MATHS TEACHER HUB
GCSE Higher revision sheet - 7

1. Write down the mathematical name of shaded section.



.....

2. Express 270 as a product of its prime factors.

.....

3. Solve
 $7y - 19 = 5y - 3$

.....

4. Work out 3.72×1.8

.....

5. The number 580 has been rounded to 2 significant figures. Write down the error interval.

.....

6. Work out
 $2\frac{2}{5} \div 1\frac{1}{4}$

.....

7. Write down the n th term for this quadratic sequence.

9,15,25,39

.....

8. Simplify

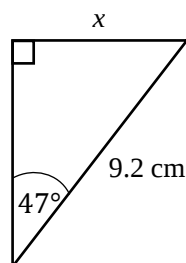
$$\frac{3e^2f \times 12e^{10}f^{-2}}{9e^4f^{-3}}$$

.....

9. Beth wants to estimate how many buttons there are in a jar.
She randomly takes 30 buttons, marks them then puts them back.
Beth then shakes the jar and takes out 45 buttons. 6 are marked.
Estimate how many buttons are in the jar.

.....

10. Work out the value of x .



.....

11. Toby placed £1400 into a savings account offering 1.3% **compound interest**.
How much will be in the account in 4 years time?

.....

12. Mark runs at an average speed of 8.5km/h
He ran for 1 hour and 20 minutes.
What distance did mark run?

.....

13. 12 students have a mean height of 168cm.
The 7 boys have a mean height of 173cm
Work out the mean height of the girls.

.....

14. Write down the coordinates of the turning point of the graph $y = x^2 - 8x + 3$

.....

15. E is inversely proportional to M^3 .
 $E = 0.1$ when $M = 3$

Work M when $E = 0.0216$

.....

16. Starting with $x_0 = 0$ use the iterative formula

$$x_{n+1} = \frac{1}{4} - \frac{x_n^3}{4}$$

to find x_3

.....