

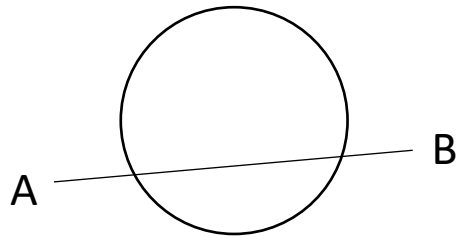
 **MATHS TEACHER HUB**  
**GCSE Higher revision sheet - 1**

1. Solve

$$2x + 5 = 7x + 8$$

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2. Write down the mathematical name of line AB.



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3. Express 300 as a product of its prime factors.

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4. Work out  $4.12 \times 3.5$

.....

5. Work out

$$1\frac{2}{5} \times \frac{3}{4}$$

.....

6. The number 6.2 has been rounded to 1 decimal place.  
Write down the error interval.

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7. Simplify

$$\frac{21m^7n^5}{3mn^{-2}}$$

.....

8. Write down the  $n$ th term for this quadratic sequence.

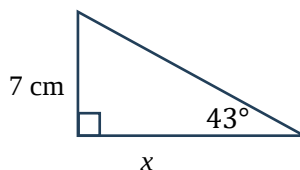
15, 19, 25, 33

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9. Helen wants to estimate how many butterflies there are in an enclosure. She captures 60 and marks them. The next day she captures 45 and 4 are marked.  
Estimate how many butterflies there are in the enclosure.

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10. Work out the value of  $x$ .



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11. A car travels at an average speed of 36mph for 20 minutes.  
How far has the car travelled?

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12. Leah is placing £780 into a savings account offering 1.4% **compound interest**.  
How much will she have in 3 years?

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13. Write down the coordinates of the turning point of the graph  
 $y = x^2 + 6x - 2$

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14. In a class there are 8 girls and 6 boys. The mean height of the girls is 154cm. The mean height of the boys is 160cm.  
Work out the mean height of the class.

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15. Using  $x_{n+1} = 7 - \frac{5}{x_n^2}$

Starting with  $x_0 = 1$  find  $x_3$

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16.  $J$  is inversely proportional to  $L^3$ .  
 $L = 0.4$  when  $J = 37.5$

Work  $L$  when  $J = 19.2$

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