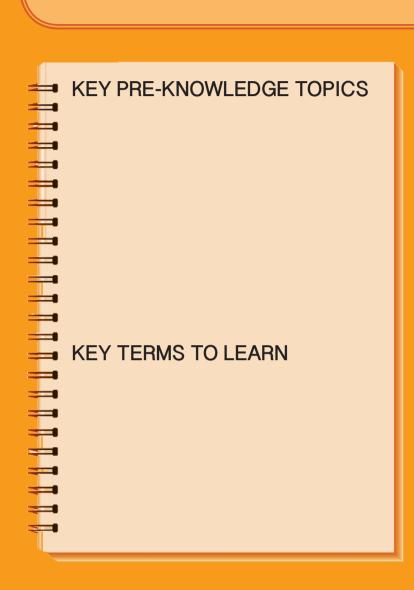
## TRANSITION TO SINTH FORM TASK

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TRANSITION TASK

**RECOMMENDED WEBSITES** 



**PLACES TO VISIT** 





BEYOND THE CLASSROOM







## **Maths Summer Work**

In order for you to have the best possible start to your A-level Maths course, we need you to complete the following two worksheets (write the answers and working on the sheet), and bring them to your first Maths lesson in September. Many thanks.

1. Solve 
$$1 - x = 5x - 3$$

2. Solve 
$$\frac{a-2}{3} = \frac{1-a}{2}$$

[3]

3. Factorise  $2x^2 + x - 15$ 

[2]

5. Write as a single fraction 
$$\frac{2x+1}{3} + \frac{x-1}{4}$$

[3]

6. Make u the subject of the formula  $s = \frac{1}{2} (u + v)t$ .

[4]

7. Make 
$$x$$
 the subject of the formula  $g = \frac{1}{\sqrt{(\alpha^2 - x^2)}}$ 

8. Make 
$$a$$
 the subject of the formula  $b = \frac{a+x}{a+c}$ 

9. Simplify 
$$\frac{y^2-1}{y^2-y-2}$$

[4]

10. Solve 
$$2x + 3y = -7$$
  
 $5x - 2y = 11$ 

11. Solve 
$$2x + y = 2$$
,  $x^2 + y^2 = 25$  simultaneously.

[6]

12 Rationalise 
$$\frac{2+\sqrt{3}}{5-\sqrt{5}}$$

[4]

13 Simplify 
$$\left(\frac{y^{-4}}{y^3}\right)^5$$