



C1
C2
Test

2016 - Summer revision

Name.....Surname..... Year.....

For all the questions you must show all your working out.

1. The straight line l passes through the point $P(-3, 6)$ and the point $Q(1, -4)$.
i) Find an equation for l in the form $ax + by + c = 0$, where a , b and c are integers.

The straight line m has the equation $2x + ky + 7 = 0$, where k is a constant.

Given that l and m are perpendicular,

- ii) find the value of k .

(8)

2. Show that :

$$\sum_{r=1}^n \frac{r+3}{2} = kn(n+7), \quad \text{where } k \text{ is a rational constant to be found.}$$

(4)

3. Evaluate : $\sum_{r=1}^{50} (80 - 3r)$.

(3)

4. Solve the simultaneous equations :

$$x - 3y + 7 = 0$$

$$x^2 + 2xy - y^2 = 7$$

(5)

Please try to write how much you can for every single question.
Every marks are very important for you.
Good luck!

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