

Y12 CO-ORDINATE GEOMETRY TASK.

Draw Triangle ABC where A is (2, 1) B is (14, 7) and C is (10, 15)

1. Find the gradients of AB and BC.

Grad AB = $\frac{1}{2}$ Grad BC = -2

What does this tell us about AB and BC? $\frac{1}{2} \times -2 = -1$ so *perpendicular*

2. Find the Mid Points of BC and AC and find the Equation of the line joining the mid points.

Mid Point BC = (12, 11) Mid point AC = (6, 8)

Grad = $\frac{1}{2}$ equ is $y = \frac{1}{2}x + 6$

3. Find the co-ordinates of a point D which would make ABCD into a rectangle.

D = (-2.9)

4. Find the co-ordinates of a point E which would make AEBC into a parallelogram.

E = (6, -7)

5. Find the area of triangle ABC. Explain your method.

