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   =   Grad BC =

What does this tell us about AB and BC?

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

Mid Point BC =   Mid point AC =

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

   D =

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

   E =

5. Find the area of triangle ABC. <u>Explain</u> your method.