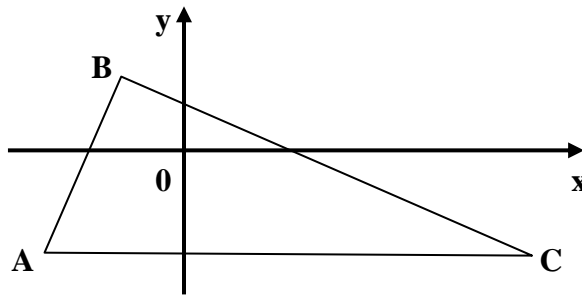


## Higher Straight Line

### Official Homework

- Q1. Find the equation of the line through  $(-3, 2)$  and parallel to the line  $2x + 3y + 4 = 0$ . (3)
- Q2. Find the angle which the line joining the points  $(0, 0)$ ,  $(\sqrt{3}, 1)$  make with the positive direction of the x-axis. (2)
- Q3. Find the equation of the median AD of triangle ABC where the coordinates of A, B and C are  $(-2, 3)$ ,  $(-3, -4)$  and  $(5, 2)$  respectively. (3)
- Q4. Find the equation of the perpendicular bisector of the line joining  $A(2, -1)$  and  $B(8, 3)$ . (3)
- Q5. Prove that the points  $A(-2, 1)$ ,  $B(-1, 0)$  and  $C(7, -8)$  are collinear. (3)
- Q6. A triangle ABC has vertices  $A(-4, -3)$ ,  $B(-2, 1)$  and  $C(6, -3)$



- (a) Show that the triangle ABC is right angled at B. (3)
- (b) The medians AD and BE intersect at M.
- (i) Find the equations of AD and BE. (6)
- (ii) Find the coordinates of M (2)

**Total 25 marks**

#### **Remember**

1. Use your notes
2. Look out for **keywords**
3. **CLEAR** working
4. Check ! does your answer make sense
5. Double check before handing in

