10 **(a)** P is the point $(-5, 3)$ and Q is the point $(2, -1)$.

Find the coordinates of the mid-point of PQ.

(..... , ...) [2]

8 A is the point $(-3, 5)$ and B is the point $(5, 2)$.

Find the coordinates of the midpoint of the line AB.

(..... , ...) [2]

3 A is the point $(0, 7)$ and B is the point $(-2, 1)$.
M is the mid-point of AB.

Find the coordinates of M.

(..... , ...) [2]

5 Point A has coordinates $(-3, 2)$.
Point B has coordinates $(5, -4)$.

(a) Find the mid-point of AB.

(....., ...) [2]

(b) Find the length of AB.

..... [3]

9 A is the point $(5, -5)$ and B is the point $(9, 3)$.

(a) Find the coordinates of the midpoint of AB.

(....., ...) [2]

(b) Find the length of AB.

..... [3]

16 A is the point (5, 7) and B is the point (9, −1).

(a) Find the length AB.

..... [3]

10 The point A has coordinates (2, 9) and the point B has coordinates (5, 3).

Find the length of AB.
Give your answer in surd form.

..... [3]

8 A is the point $(-2, 4)$ and B is the point $(7, 1)$.

Find the length of AB giving your answer in its simplest surd form.

..... [4]

3 A line, l, joins point F (3, 2) and point G (− 5, 4).

(a) Calculate the length of line l.

..... [3]

(c) A point H lies on the y-axis such that the distance $GH = 13$ units.

Find the coordinates of the two possible positions of H.

(....., ...) and (....., ...) [4]

9 A is the point (0, 2), B is the point (3, 3) and C is the point (4, 0).

(a) Determine if triangle ABC is scalene, isosceles or equilateral.
You must show all your working.

[4]