**6A Mid-Points of Line Segments**

1. Find the midpoint of this pair of points:
2. $\left(2,3\right) and (6,9)$
3. $\left(2a,-4b\right) and (7a,8b)$
4. AB is a diameter of a circle, where A and B are the coordinates (-3,8) and (5,4) respectively. Find the coordinates of the centre of the circle.
5. PQ is a diameter of a circle, centre (2,-2). Given that P is (8,-5), find the coordinates of Q.