

Find the distance between the given two points. Give exact answers

1. $(-2, 8)$ , $(6, 0)$	2. $(-3, -1)$ , $(7, 4)$
3. $(-5, 8)$ , $(1, 6)$	4. $(-2, 10)$ , $(10, -2)$
5. $(8, 3)$ , $(2, -1)$	6. $(-10, -15)$ , $(-4, -8)$

Find the Midpoint between the given two points.

7. $(3, -7)$ , $(-3, 1)$	8. $(2, 2)$ , $(6, 14)$
9. $(0, -6)$ , $(-4, 9)$	10. $(9, -2)$ , $(3, 6)$
11. $(-5, 8)$ , $(1, 6)$	12. $(-5, 4)$ , $(2, -4)$

13. The point  $(1, -12)$  is the midpoint of segment  $\overline{AB}$ . If the coordinates of point A are  $(3, 4)$ , find the coordinates of point B.

14. If the distance between points A and B is  $3\sqrt{2}$  units and point A is  $(-2, 6)$ , find the values of x if point B is  $(x, 3)$ .