

Distance and Midpoint Formulas;
Circles

1. Find the distance between each pair of points. If necessary, round to 2 decimal places:
(Similar to p.300 #2-10)

$(3, -5)$ and $(9, -7)$

2. Find the distance between each pair of points. If necessary, round to 2 decimal places:
(Similar to p.300 #16)

$(3\sqrt{2}, 2\sqrt{5})$ and $(-\sqrt{2}, 4\sqrt{5})$

3. Find the midpoint of each line segment with the given endpoints:
(Similar to p.300 #20-24)

$(-5, -9)$ and $(-3, -4)$

4. Find the midpoint of each line segment with the given endpoints
(Similar to p.300 #30)

$(\sqrt{40}, -3)$ and $(\sqrt{10}, 3)$

5. Write the standard form of the equation of the circle with the given center and radius
(Similar to p.300 #38)

Center $(-2, -4)$, $r = \sqrt{3}$

6. Give the center and radius of the circle described by the equation and graph each equation.
(Similar to p.300 #46)

$$(x + 2)^2 + (y - 3)^2 = 16$$

7. Give the center and radius of the circle described by the equation and graph each equation.
(Similar to p.300 #52)

$$x^2 + (y + 4)^2 = 1$$

8. Complete the square and write the equation in standard form. Then give the center and radius of each circle and graph the equation.
(Similar to p.300 #54)

$$x^2 + y^2 - 8x - 16y + 76 = 0$$

9. Complete the square and write the equation in standard form. Then give the center and radius of each circle and graph the equation.
(Similar to p.300 #64)

$$x^2 + y^2 + 7x + 9y + \frac{49}{4} = 0$$