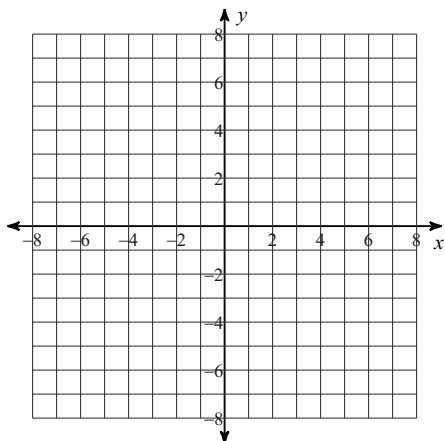


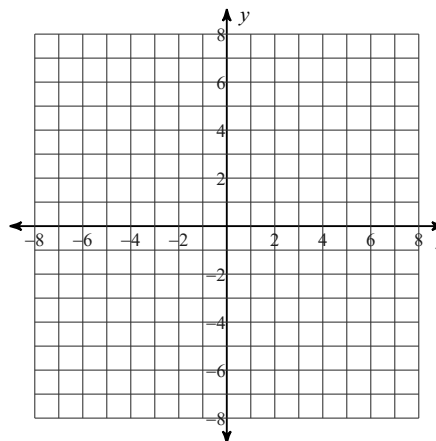
7.4 - Quiz Review

Identify the center and radius of each. Then sketch the graph.

1) $(x - 3)^2 + (y - 2)^2 = 9$



2) $(x - 1)^2 + y^2 = 36$



Use the information provided to write the standard form equation of each circle.

3) Center: $(4, 4)$
Radius: 11

4) Center: $(16, -8)$
Radius: 2

5) Center: $(-7, -7)$
Area: 16π

6) Center: $(-1, 3)$
Area: 64π

7) Center: $(-1, 15)$
Circumference: 6π

8) Center: $(3, -2)$
Circumference: 12π

Convert from Standard Form to General Form.

9) $(x - 9)^2 + (y + 5)^2 = 36$

10) $(x - 15)^2 + (y + 3)^2 = 9$

11) $(x - 16)^2 + (y - 10)^2 = 4$

12) $(x - 8)^2 + (y + 10)^2 = 49$

Convert from General Form to Standard Form

13) $x^2 + y^2 + 24x - 6y + 137 = 0$

14) $x^2 + y^2 - 32x - 14y + 304 = 0$

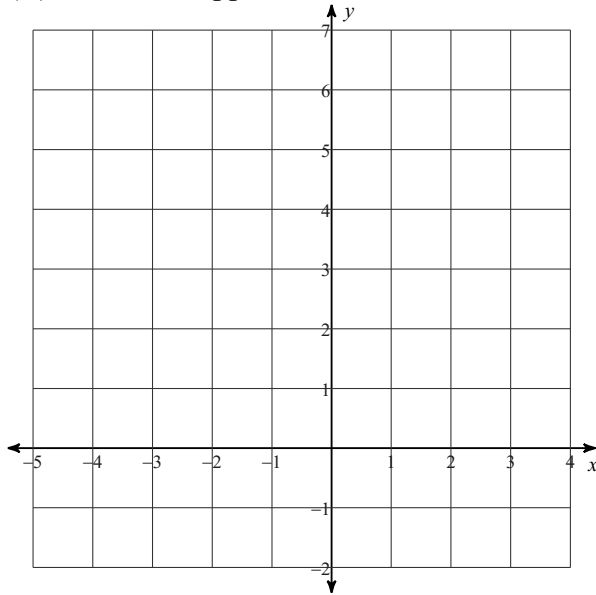
15) $x^2 + y^2 - 8x + 14y - 79 = 0$

16) $x^2 + y^2 + 28x + 10y + 212 = 0$

17) Plot A(-5, 6), B(3, 7), C(4, -1), & D(-4, -2).

(A) Prove that ABCD is a rectangle by showing opposite sides are CONGRUENT.

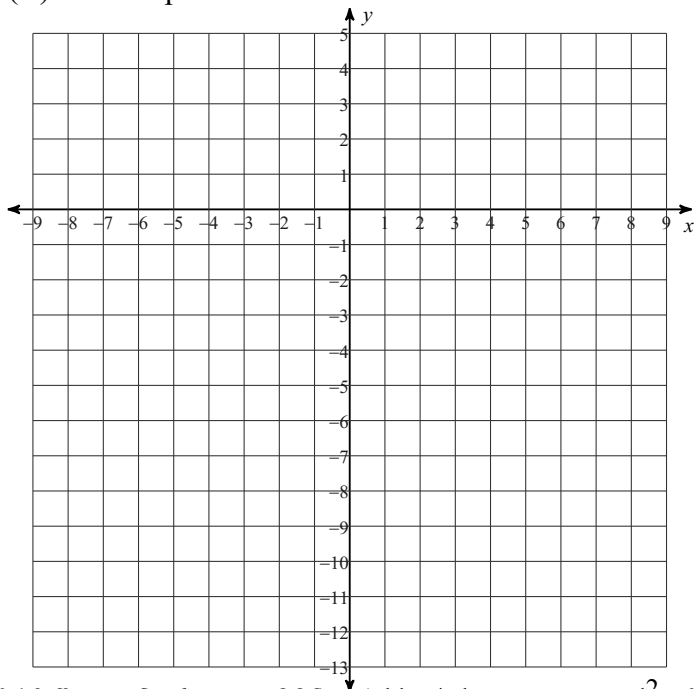
(B) Prove that opposite sides are PARALLEL.



18) Plot A(-6, -13), B(-3, 3), C(4, 5), & D(6, -2).

(A) Prove the DIAGONALS of kite ABCD are PERPENDICULAR.

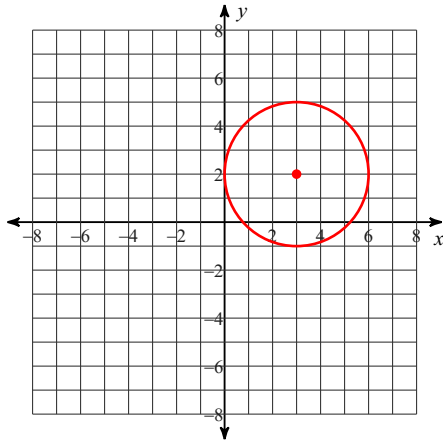
(B) Prove 2 pairs of consecutive sides are CONGRUENT.



7.4 - Quiz Review

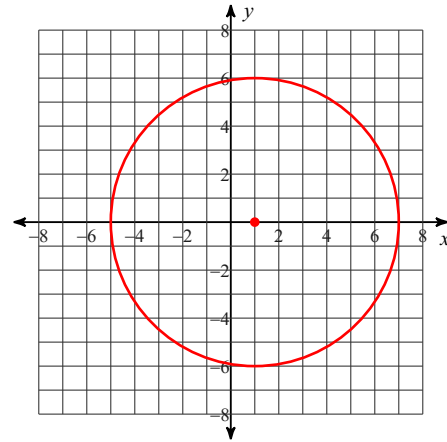
Identify the center and radius of each. Then sketch the graph.

1) $(x - 3)^2 + (y - 2)^2 = 9$



Center: (3, 2)
Radius: 3

2) $(x - 1)^2 + y^2 = 36$



Center: (1, 0)
Radius: 6

Use the information provided to write the standard form equation of each circle.

- 3) Center: (4, 4)
Radius: 11

$$(x - 4)^2 + (y - 4)^2 = 121$$

- 4) Center: (16, -8)
Radius: 2

$$(x - 16)^2 + (y + 8)^2 = 4$$

- 5) Center: (-7, -7)
Area: 16π

$$(x + 7)^2 + (y + 7)^2 = 16$$

- 6) Center: (-1, 3)
Area: 64π

$$(x + 1)^2 + (y - 3)^2 = 64$$

- 7) Center: (-1, 15)
Circumference: 6π

$$(x + 1)^2 + (y - 15)^2 = 9$$

- 8) Center: (3, -2)
Circumference: 12π

$$(x - 3)^2 + (y + 2)^2 = 36$$

Convert from Standard Form to General Form.

9) $(x - 9)^2 + (y + 5)^2 = 36$

$$x^2 + y^2 - 18x + 10y + 70 = 0$$

10) $(x - 15)^2 + (y + 3)^2 = 9$

$$x^2 + y^2 - 30x + 6y + 225 = 0$$

11) $(x - 16)^2 + (y - 10)^2 = 4$

$$x^2 + y^2 - 32x - 20y + 352 = 0$$

12) $(x - 8)^2 + (y + 10)^2 = 49$

$$x^2 + y^2 - 16x + 20y + 115 = 0$$

Convert from General Form to Standard Form

13) $x^2 + y^2 + 24x - 6y + 137 = 0$

$(x + 12)^2 + (y - 3)^2 = 16$

14) $x^2 + y^2 - 32x - 14y + 304 = 0$

$(x - 16)^2 + (y - 7)^2 = 1$

15) $x^2 + y^2 - 8x + 14y - 79 = 0$

$(x - 4)^2 + (y + 7)^2 = 144$

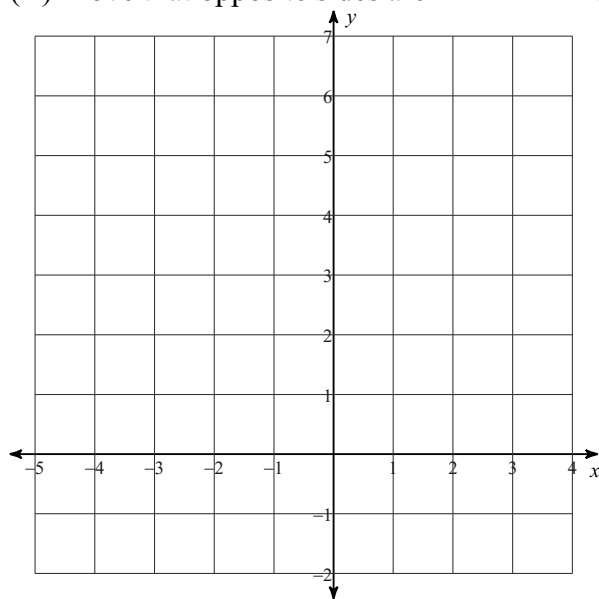
16) $x^2 + y^2 + 28x + 10y + 212 = 0$

$(x + 14)^2 + (y + 5)^2 = 9$

17) Plot A(-5, 6), B(3, 7), C(4, -1), & D(-4, -2).

(A) Prove that ABCD is a rectangle by showing opposite sides are CONGRUENT.

(B) Prove that opposite sides are PARALLEL.



18) Plot A(-6, -13), B(-3, 3), C(4, 5), & D(6, -2).

(A) Prove the DIAGONALS of kite ABCD are PERPENDICULAR.

(B) Prove 2 pairs of consecutive sides are CONGRUENT.

