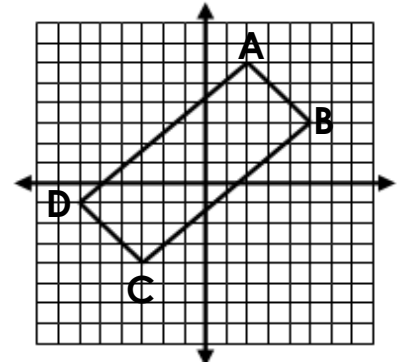


Name: _____ Date: _____

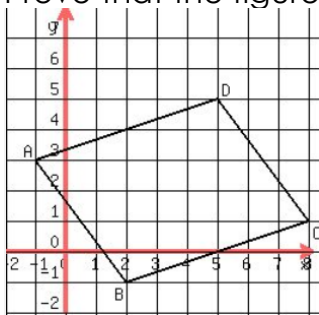
UNIT 7 TEST REVIEW

1. Prove that ABCD is a parallelogram using the distances and slopes.



2. The diagonals of a rhombus are perpendicular. Find the slopes of the diagonals to prove that it's not a rhombus.

3. Prove that the figure is a parallelogram using distance, Pythagorean Theorem, or slope.

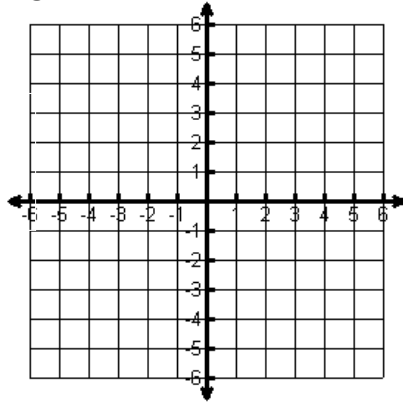


Graph the following circles. State the center and radius.

4. $x^2 + y^2 = 24$

Center: _____

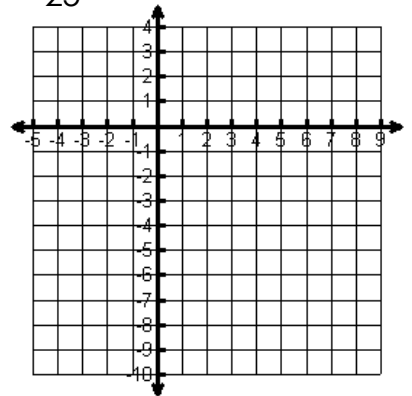
Radius: _____



5. $(x - 2)^2 + (y + 3)^2 = 25$

Center: _____

Radius: _____



Write the standard equation for the circle.

6. $x^2 + y^2 - 10x - 2y = -10$

Write the general form for circle.

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

8. Write the equation of the circle centered at $(-4, 6)$ with a diameter of 16.

9. A circular disk drive has a diameter with endpoints at $(-9, 2)$ and $(15, 12)$. Find the center and radius of the disk drive. Write the equation of the circle in standard form.

Center: _____

$r =$ _____

Equation: _____

10. Find the **center** of a circle whose diameter has endpoints at: $(-5, 3)$ $(2, 6)$.

11. Find the coordinates of the **other endpoint** of a diameter with an endpoint of $(-1, 5)$ and a **center** at $(2, -3)$.

12. Circle C has a center of $(5, 2)$ and a radius of 6. Does the point $(8, 7)$ lie on circle C?

13. Name the polygon(s) that has the following:

a) 4 congruent sides and 4 right angles: _____

b) Diagonals are congruent and 4 right angles: _____

c) Diagonals are perpendicular and consecutive sides are congruent: _____

d) 2 pairs of parallel sides and 4 congruent sides: _____
