

NAME: _____

P.I. A2.A.47: Determine the center-radius form for the equation of a circle in standard form

1. Change the equation to standard form and name the figure.

$$4x^2 + 4y^2 + 24x - 32y + 80 = 0$$

2. Change the equation to standard form and name the figure.

$$3x^2 + 3y^2 + 12x - 24y + 57 = 0$$

3. Change the equation to standard form and name the figure.

$$4x^2 + 4y^2 - 40x + 48y + 224 = 0$$

4. Change the equation to standard form and name the figure.

$$4x^2 + 4y^2 - 8x + 40y + 92 = 0$$

5. Change the equation to standard form and name the figure.

$$3x^2 + 3y^2 - 42x - 6y + 141 = 0$$

NAME: _____

6. Change the equation to standard form and name the figure.

$$4x^2 + 4y^2 + 16x + 8y - 12 = 0$$

9. Change the equation to standard form and name the figure.

$$3x^2 + 3y^2 - 30x - 12y + 72 = 0$$

7. Change the equation to standard form and name the figure.

$$4x^2 + 4y^2 - 32x + 24y + 96 = 0$$

10. Change the equation to standard form and name the figure.

$$4x^2 + 4y^2 - 56x + 16y + 180 = 0$$

8. Change the equation to standard form and name the figure.

$$3x^2 + 3y^2 - 24x - 24y + 90 = 0$$

[1] $(x+3)^2 + (y-4)^2 = 5$; The figure is a circle.

[2] $(x+2)^2 + (y-4)^2 = 1$; The figure is a circle.

[3] $(x-5)^2 + (y+6)^2 = 5$; The figure is a circle.

[4] $(x-1)^2 + (y+5)^2 = 3$; The figure is a circle.

[5] $(x-7)^2 + (y-1)^2 = 3$; The figure is a circle.

[6] $(x+2)^2 + (y+1)^2 = 8$; The figure is a circle.

[7] $(x-4)^2 + (y+3)^2 = 1$; The figure is a circle.

[8] $(x-4)^2 + (y-4)^2 = 2$; The figure is a circle.

[9] $(x-5)^2 + (y-2)^2 = 5$; The figure is a circle.

[10] $(x-7)^2 + (y+2)^2 = 8$; The figure is a circle.