

## 6.10 Writing Equations of Circles HW

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**Directions: Write the equation of the circle in STANDARD form.**

1)  $x^2 + 2x + y^2 - 10y + 10 = 0$

2)  $x^2 + y^2 - 4x + 6y + 9 = 0$

3)  $x^2 + y^2 - 10x - 12y + 40 = 0$

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

5)  $7x^2 + 7y^2 - 28y + 14 = 0$

6)  $3x^2 + 3y^2 + 18x + 6y = 0$

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Directions: Write the equation of the circle in GENERAL form.

7)  $(x - 2)^2 + (y + 6)^2 = 25$

8)  $(x + 5)^2 + y^2 = 27$

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Directions: Write the equation of the circle in both forms.

9) Center:  $(2, -3)$  & Radius: 7

10) Center:  $(-13, -16)$  & Point on the Circle:  $(-10, -16)$

\* 11) Ends of the diameter are  $(18, -13)$  and  $(4, -3)$

12) Center  $(0, 13)$  & Area of  $25\pi$

