Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Equations of Circles**

**Standard Form of a Circle**

**General Form of a Circle**

**Completing the Square:**

1. Move the constant to the other side.
2. Add ****to both sides of the equation.
3. Factor.
4. **** 2. **** 3. ****

**Converting from General to Standard Form:**

1. A needs to be 1. Divide if needed.
2. Move the x terms together, the y terms together & E to the other side.
3. Complete the square (as needed) for x. Complete the square (as needed) for y.
4. Factor the left & simplify the right.

**Write the standard form of the equation for the circle. State the center and radius.**

1. ****
2. ****
3. ****
4. ****

**Write the general form of the equation for the circle.**

1. ****