

Name key

Date _____

Period _____

Circles Worksheet Day #2

**MUST show ALL WORK!*

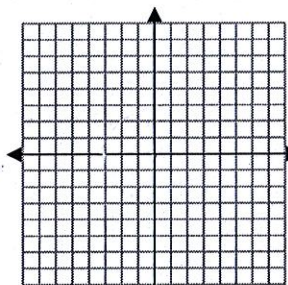
Put each equation in standard form and graph the circle.

1. $x^2 = 9 - y^2$

$x^2 + y^2 = 9$

$C = (0, 0)$

$r = 3$

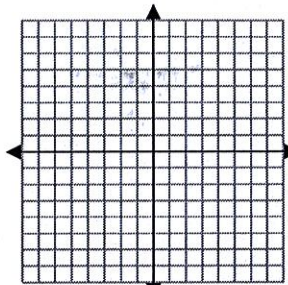


2. $2x^2 + 2y^2 - 8 = 0$

$x^2 + y^2 = 4$

$C = (0, 0)$

$r = 2$

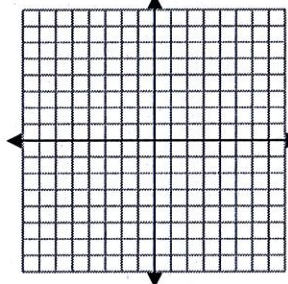


3. $x^2 + y^2 + 4y + 4 = 9$

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

$C = (0, -2)$

$r = 3$

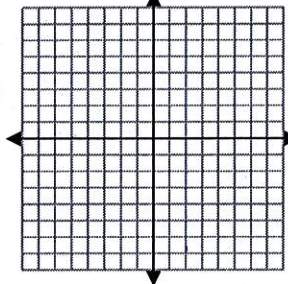


4. $x^2 + 6x + y^2 = 7$

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

$C = (-3, 0)$

$r = 4$

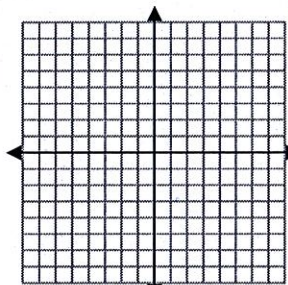


5. $y^2 + x^2 + 4x - 4y - 1 = 0$

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

$C = (-2, 2)$

$r = 3$

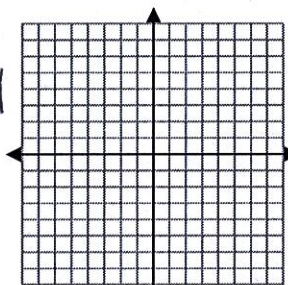


6. $5x^2 + 20x + 5y^2 = 35$

$(x + 2)^2 + y^2 = 11$

$C = (-2, 0)$

$r = \sqrt{11}$

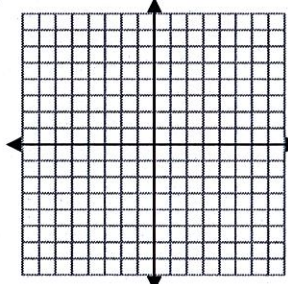


7. $4x^2 + 4y^2 + 32y - 36 = 0$

$x^2 + (y + 4)^2 = 25$

$C = (0, -4)$

$r = 5$



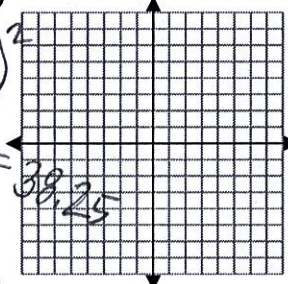
8. $x^2 + y^2 - 3x + 8y = 20$

$(x - \frac{3}{2})^2 + (y + 4)^2 = \frac{153}{4}$

$= 38.25$

$C = (\frac{3}{2}, 4)$

$r = \frac{\sqrt{153}}{2} = 6.18$

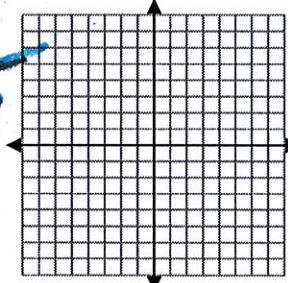


* 9. $x^2 - 12x + 84 = -y^2 + 16y$

$(x - 6)^2 + (y - 8)^2 = 16$

$C = (6, 8)$

$r = 4$



10. $x^2 + y^2 + 2x + 4y = 11$

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

$C = (-1, -2)$

$r = 4$

