# DO NOW

ALGEBRA 2 · 5 MINUTES · START RIGHT AWAY

**Lesson 9-2d** **Complete the Square to Find the Center and Radius of a Circle**

Name _____ Date _____ Per _____

## 1 FLUENCY

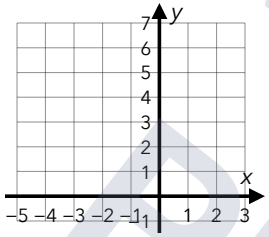
Complete the square: $x^2 + y^2 + 6x - 4y - 12 = 0$.

$$(x + 3)^2 + (y - 2)^2 = \square$$

center ( , ) radius

## 2 VISUAL MODEL

Rewrite $x^2 + y^2 + 2x - 6y + 6 = 0$ in standard form. Then graph it.




$(x + \square)^2$

$+ (y - \square)^2$

$= \square$

$r = \square$

## 3 APPLICATION

A round window is modeled by $x^2 + y^2 - 8x - 6y = 0$ (in feet). Find the center and the diameter of the window.

center ( , ) diameter ft

WORK

## 4 REASONING

Which equation does NOT represent a circle?

**A** $x^2 + y^2 - 2x = 8$

**B** $x^2 + y^2 + 4x - 2y + 10 = 0$

**C** $x^2 + y^2 - 6y = 0$

**D** $x^2 + y^2 + 2x + 2y = 2$

_____

*We don't divide our effort, we **multiply** it!*

✎ Show your work ✓ Check your work ★ Try your best

Preview - the full worksheet and its answer key are at primeworksheet.com