**Write an equation in slope-intercept form for the line that passes through the**

**given point and is perpendicular to the graph of each equation.**

**10.** **RADAR** On a radar screen, a plane located at *A*(–2, 4) is flying toward *B*(4, 3).

Another plane, located at *C*(–3, 1), is flying toward *D*(3, 0). Are the planes’ paths perpendicular? Explain.

**9.** (–4, 3), *y* = $\frac{1}{2}$*x –* 6

*y* = $\frac{1}{2}x+1$

**Skills Practice**

***Parallel and Perpendicular Lines***

18. (0, 0), *y* = $\frac{1}{2}$*x –* 1

**17.** (–2, 3), *y* = $\frac{1}{4}$*x –* 4

**11.** *y* = $\frac{2}{3}$*x* + 3, *y* = $\frac{3}{2}$*x*, 2*x –* 3*y* = 8

*y*

(–2, –3)

***x***

***O***

***y***

(1, –1)

***O***

***x***

***y***

***x***

***O***

(–2, 2)

***y***

*Glencoe Algebra 1*

Chapter 4

**26**

**16.** (–4, 5), *y* = –4*x* – 1

**15.** (–1, –6), *x* + 3*y* = 6

**14.** (4, –1), *y* = 2*x –* 4

**13.** (–3, –2), *y* = *x* + 2

**12.** *y* = 4*x*, *x* + 4 *y* = 12, 4*x* + *y* = 1

**Determine whether the graphs of the following equations are *parallel* or**

***perpendicular*. Explain.**

**8.** (–4, 2), *y* = *x* + 3

**7.** (1, –3), *y* = –4*x –* 1

**6.** (–1, 1), *y* = *x –* 4

**5.** (–1, –2), *y* = –3*x* + 5

**4.** (3, 2), *y* = 3*x* + 4

= 2*x* – 1

*y* = –*x* + 3

**3.**

**2.**

**1.**

**Write an equation in slope-intercept form for the line that passes through the**

**given point and is parallel to the graph of each equation.**

**4-4**

NAME DATE PERIOD



