

Name \_\_\_\_\_

**Find the point-slope form of the equation of the line satisfying the given conditions and use this to write the slope-intercept form of the equation.**

1) Slope = 5, passing through (4, 2)

2) Slope = -2, passing through (5, 2)

3) Slope = 3, passing through (-3, 1)

4) Slope =  $\frac{5}{2}$ , passing through (0, 6)

5) Slope =  $-\frac{5}{8}$ , passing through (0, 2)

6) Slope =  $\frac{5}{4}$ , passing through (-8, -16)

7) Passing through (0, -3) and (-3, -6)

8) Passing through (0, -2) and (-3, 1)

9) Passing through (-5, 1) and (-2, 4)

10) Passing through (4, -1), (-1, 4)

11) Passing through (0, 9) and (-2, 13)

12) Passing through (2, -5) and (1, -7)

13) Passing through (0, -7) and (8, -17)

14) Passing through (4, 4) and (2, -1)

15) x-intercept =  $\frac{5}{2}$  and y-intercept = 2

16) x-intercept = 8 and y-intercept = 4

24) Parallel to the line  $8x + 3y = 39$ ; containing the point (3, 3).

**Write an equation in slope-intercept form of the line satisfying the given conditions.**

17) Parallel to the line  $y = 3x$ ; containing the point (6, 7)

25) Perpendicular to the line  $x - 3y = 3$ ; containing the point (4, -4).

18) Parallel to the line  $x + 4y = 6$ ; containing the point (0, 0)

26) The line has a y-intercept at 1 and is parallel to the line containing (6, 13) and (9, 19).

19) Parallel to the line  $-5x - y = 2$ ; containing the point (0, 0)

27) Perpendicular to the line  $y = -2x - 4$ ; containing the point (-4, -4).

20) Parallel to the line  $y = 8$ ; containing the point (5, 9)

**Solve the problem.**

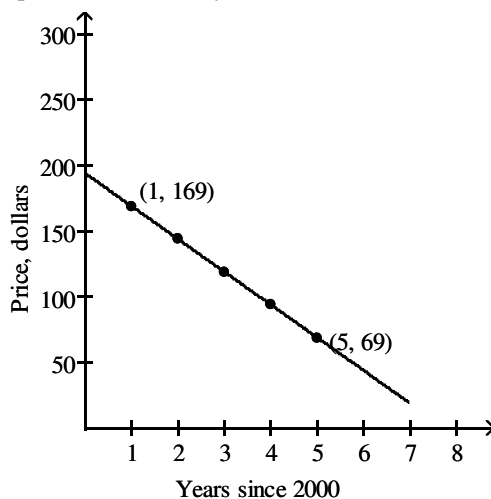
28) The graph below shows the average retail price of the least-expensive DVD player available at Mega Mart over the past few years. Use the two points whose coordinates are given to find the slope-intercept form of an equation that models the data.

21) Parallel to the line  $x = -3$ ; containing the point (8, 7)

22) Parallel to the line  $y = -4x - 1$ ; containing the point (2, 6)

23) Parallel to the line  $y = 3x - 6$ ; containing the point (6, 7).

Average Retail Price of Least Expensive DVD Player



## Answer Key

Testname: 04.5V01

1)  $y = 5x - 18$

2)  $y = -2x + 12$

3)  $y = 3x + 10$

4)  $y = \frac{5}{2}x + 6$

5)  $y = -\frac{5}{8}x + 2$

6)  $y = \frac{5}{4}x - 6$

7)  $y = x - 3$

8)  $y = -x - 2$

9)  $y = x + 6$

10)  $y = -x + 3$

11)  $y = -2x + 9$

12)  $y = 2x - 9$

13)  $y = -\frac{5}{4}x - 7$

14)  $y = \frac{5}{2}x - 6$

15)  $y = -\frac{4}{5}x + 2$

16)  $y = -\frac{1}{2}x + 4$

17)  $y = 3x - 11$

18)  $y = -\frac{1}{4}x$

19)  $y = -5x$

20)  $y = 9$

21)  $x = 8$

22)  $y = -4x + 14$

23)  $y = 3x - 11$

24)  $y = -\frac{8}{3}x + 11$

25)  $y = -3x + 8$

26)  $y = 2x + 1$

27)  $y = \frac{1}{2}x - 2$

28)  $y = -25x + 194$