

Chapter 4 Mid-Chapter Practice Quiz

SCORE _____

(Lessons 4-1 through 4-3)

Part I: Write the letter for the correct answer in the blank at the right of each question.

1. Which is the slope-intercept form of an equation for the line containing $(0, -1)$ with slope -3 ? $y = mx + b$

$b = -1$ $m = -3$

A $y = -x - 3$ B $y = -3x - 1$ C $y = x + 3$ D $x = -3y - 1$

1. B

2. Write an equation in slope-intercept form of the line with a slope of $-\frac{2}{5}$ and y-intercept of 6.

$y =$

2. $y = -\frac{2}{5}x + 6$

3. Write an equation of the line that passes through $(-1, 4)$ and $(1, 1)$.

3. $y = -\frac{3}{2}x + \frac{5}{2}$

4. Write $y - 3 = \frac{2}{3}(x - 2)$ in standard form.

$m = \frac{1 - (4)}{1 - (-1)} = -\frac{3}{2}$ $y = mx + b$ $2 = -\frac{3}{2} + b$

$1 = -\frac{3}{2}(1) + b$ $b = \frac{5}{2}$

4. $2x - 3y = -5$

5. Write $y + 2 = 2(x - \frac{4}{3})$ in slope-intercept form.

$3y - 9 = 2(x - 2)$ $3y - 9 = 2x - 4$ $-3y + 9 = -2x + 4$ $-5 = -2x - 3y$ $\frac{-8}{3} - \frac{6}{3} = -\frac{14}{3}$

$y + 2 = 2x - \frac{8}{3} - 2$ $y = 2x - \frac{14}{3}$

5. $y = 2x - \frac{14}{3}$

6. A cell phone company charges \$32 per month of service. The cost of a new cell phone, plus 9 months of service, is \$493.99. How much does it cost to buy a new cell phone?

F \$79.99 G \$126.00 H \$205.99 J \$289.99

6. H

Part II

$32(9) + x = 493.99$ $x = 205.99$
 $288 + x = 493.99$

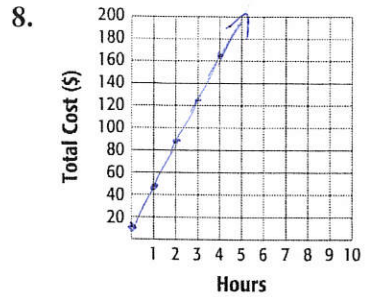
For Questions 7-10, use the following information.

Nikko needs to get his air-conditioner fixed. The technician will charge Nikko a flat fee of \$10 plus an additional \$40 for each hour of work.

7. Write an equation to represent Nikko's total cost to repair his air-conditioner. Use t for total cost and h for hours.

$t = 40h + 10$

8. Graph this equation.



9. How much will it cost Nikko if the technician has to spend 5 hours working on the air-conditioner?

9. \$210

10. How many hours must the technician work for it to cost Nikko \$170?

$170 = 40h + 10$
 -10
 $160 = 40h$ $h = 4$
 $\frac{160}{40} = \frac{40h}{40}$

10. 4 hours