Test, Form 2A

SCORE

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

1. What is the slope (grade) of a road that rises 6 feet for every horizontal change of 100 feet?

B. $\frac{1}{6}$

C. $\frac{3}{50}$

C

2. What is the constant rate of change between the two quantities in the table?

Time (minutes) (x)	15	30	45	60
Number of Pages Read (y)	10	20	30	40

F. $\frac{30}{15}$ **G.** $\frac{15}{1}$ **H.** $\frac{2}{3}$

Н

3. What is the slope of the line that passes through the points E(-1, 4)and F(2, 6)?

B. $-\frac{2}{3}$ **C.** $\frac{2}{3}$ **D.** $\frac{3}{2}$

C

4. The cost of nails varies directly with the number of pounds bought. If 4 pounds of nails cost \$11.60, what is the cost of 3.5 pounds?

F. \$5.80

G. \$10.15

H. \$11.60

I. \$13.05

G

5. What are the slope and *y*-intercept for the graph of y - 4x = -2.

A. slope: -4, y-intercept: -2

B. slope: 4, y-intercept: -2

C. slope: -4, y-intercept: 2

D. slope: 4, *y*-intercept: 2

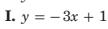
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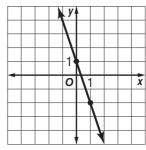
6. What is the equation in slope-intercept form for the graph shown?

F.
$$y + x = -3$$

H.
$$y - 3x = 1$$

G.
$$y = 3x + 1$$





- **7.** What are the *x* and *y*-intercepts for the graph of -3x + 5y = -15?

A. *x*-intercept: -5, *y*-intercept: -3

B. x-intercept: -5, y-intercept: 3

C. x-intercept: 5, y-intercept: 3

D. *x*-intercept: 5, *y*-intercept: -3

D

Test, Form 2A (continued)

SCORE

8. At store A, pencils are sold individually. The cost y of x pencils is represented by the equation y = 0.55x. The costs of pencils at store B are shown in the table.

Number of Pencils (x)	6	12	18	24
Cost (y)	\$3.06	\$6.12	\$9.18	\$12.24

Which of the following statements is true?

- **F.** The pencils at store A cost more.
- **G.** The pencils at store A cost \$0.27 each.
- **H.** The pencils at store B cost \$0.30 each.
- **I.** The pencils at store B cost more.

- 8. ____F
- **9.** What is the equation in slope-intercept form for the line that passes through the points (-2, -1) and (1, 5)?

A.
$$y = 2x - 3$$

C.
$$y = -2x - 3$$

B.
$$y = 2x + 3$$

D.
$$y = -2x + 3$$

9. B

10. What is the solution of the system of equations?

$$y - 2x = -6$$

$$y - 4x = 0$$

$$\mathbf{F}$$
. $(-3, -12)$

G.
$$(-3, 12)$$

H.
$$(3, -12)$$

- 10. ____F
- **11.** Theo is renting two kinds of tables for his party. One type of table seats 4 people and the other seats 6 people. If 36 people will be at his party and he rents 7 tables, how many of each type of table does he rent?

12. Geneva is saving for a new dress. She already has \$20 saved and

intends to save \$7 each week. The equation for the amount of

weeks. What do the slope and y-intercept represent?

money y she has saved is y = 7x + 20, where x is the number of

- 3 tables seating 4 people, 4 tables seating 11. 6 people
- slope: her savings each week; y-intercept: the amount already
- 12. saved.

13. Solve the system by graphing.

$$y = -2x + 3$$

$$y = -x - 1$$

