

7th: Chapter 6
Standardized Test

Name _____
Date _____

(2 points each)

1. _____

13. _____

2. _____

14. _____

3. _____

15. _____

4. _____

16. _____

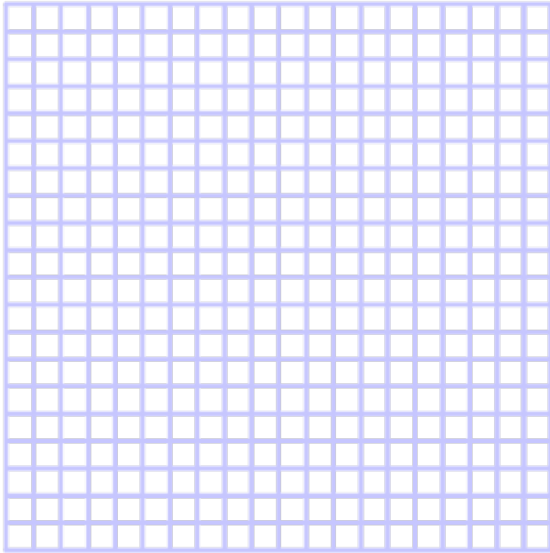
5. _____

Extra Credit (1 point each)

6. _____

17.

a.



7. _____

8. _____

9. _____

10. _____

11. _____

b.

12. _____

18.

a. _____; _____

b. _____; _____

c. fish: _____ ounces: turtle: _____ ounces

d. _____

Multiple Choice

- Which of the ordered pairs is a solution of the equation $y = 7x - 13$?

(A) $(-13, 0)$ (B) $(-2, 1)$
 (C) $(-1, -6)$ (D) $(3, 8)$
- Which is the best description of the graph of $-7x + 2y = 42$?

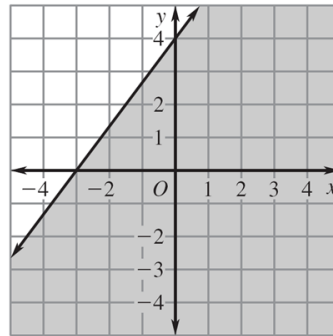
(A) a vertical line
 (B) a horizontal line
 (C) a line slanted downward from left to right
 (D) a line slanted upward from left to right
- What is the slope of the line passing through the points $(-7, -5)$ and $(-3, 1)$?

(A) $\frac{2}{5}$ (B) $\frac{1}{2}$
 (C) $\frac{2}{3}$ (D) $\frac{3}{2}$
- What is the slope of the line $5x - 3y = 15$?

(A) -5
 (B) $-\frac{5}{3}$
 (C) $\frac{5}{3}$
 (D) 5
- What is the y-intercept of the line $-3x + 4y = 12$?

(A) -3
 (B) $-\frac{3}{4}$
 (C) $\frac{3}{4}$
 (D) 3

- Which inequality is represented by the graph?



- (A) $y < \frac{4}{3}x + 4$ (B) $y \leq \frac{4}{3}x + 4$
 (C) $y > \frac{4}{3}x + 4$ (D) $y \geq \frac{4}{3}x + 4$
- Which of the following equations represents direct variation?

(A) $x - y = 7$ (B) $0.7y + 0.35x = 0$
 (C) $\frac{3}{2}y = 3x - 6$ (D) $2x + 4y = 6$
 - Which ordered pair is a solution to the following system of equations?

$$y = 3x + 4$$

$$-4x + y = 2$$

(A) $(-\frac{1}{2}, 0)$ (B) $(1, 7)$
 (C) $(2, 10)$ (D) $(4, 2)$
 - What is the x-intercept and the y-intercept of the graph of $3y - 7x = 42$?

(A) x-intercept = -6 ; y-intercept = 14
 (B) x-intercept = 6 ; y-intercept = 14
 (C) x-intercept = 14 ; y-intercept = -6
 (D) x-intercept = 14 ; y-intercept = 6
 - A line with slope $\frac{3}{2}$ passes through the point $(4, 6)$ and the point $(10, y)$. What is the value of y ?

(A) 9 (B) 12
 (C) 15 (D) 21

11. The line l passes through the points (3, 2) and (18, 12). Which point is also on line l ?

- (A) (21, 14) (B) (21, 15)
(C) (21, 18) (D) (21, 20)

12. In the equation $Cy + 3x = -4$, the value of C is a constant. For what value of C will the graph of the equation be a line slanted upward from left to right?

- (A) -1 (B) 0
(C) 1 (D) 3

13. What is the y -intercept of the graph of $6x - 15y = 45$?

- (A) -7.5 (B) -3
(C) 3 (D) 7.5

14. Which equation represents a horizontal line?

- (A) $4x = 3$ (B) $4y = 3$
(C) $4x = 4y$ (D) $4x - 3y = 0$

15. Which ordered pair is a solution for the equation $y = 4x + 3$?

- (A) (0, -3)
(B) (1, 3)
(C) (2, 6)
(D) (3, 15)

16. Which line has the same slope as $5y = 4x - 3$?

- (A) $y = -\frac{5}{4}x + 3$ (B) $y = -\frac{4}{5}x + 3$
(C) $y = \frac{4}{5}x$ (D) $y = \frac{5}{4}x$

Short Response *Extra Credit*

17. Some students raised \$320 for their school library. The library can buy books for \$16 each or DVDs for \$25 each. The inequality $16x + 25y \leq 320$ models the situation, where x is the number of books and y is the number of DVDs.

- a. Graph the inequality.
b. Explain how to use the graph to find the maximum number of DVDs the library can buy if it buys 14 books.

Extended Response

18. Patrick keeps fish and turtles in an aquarium. Each fish weighs about f ounces and each turtle weighs about t ounces. Patrick uses a large net and collects 5 fish and 2 turtles weighing a combined 20 ounces. Patrick uses the net a second time and collects 4 fish and 3 turtles weighing a combined 23 ounces.

- a. Write an equation to represent the first weighing. *Explain* your answer.
b. Write an equation to represent the second weighing. *Explain* your answer.
c. Solve the system of equations.
d. There are 100 fish and 20 turtles in the tank. What is their total weight? *Justify* your response.