

Test, Form 1A

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

1. Which property of equality is used to solve $-15.75 = 2.5x$?

- A. distributive C. addition
B. subtraction D. division

1. **D**

2. Which statement explains how to solve $\frac{4}{9}x = -\frac{81}{100}$?

F. Add $\frac{9}{4}$ to both sides of the equation.

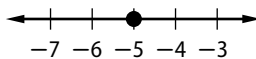
G. Add $\frac{4}{9}$ to both sides of the equation.

H. Multiply both sides of the equation by $\frac{4}{9}$.

J. Multiply both sides of the equation by $\frac{9}{4}$.

2. **J**

3. The solution to which equation is graphed on the number line?



A. $3x + 2.5 = -12.5$

C. $2x - 2.5 = -10.5$

B. $2x - 2.5 = -7.5$

D. $3x - 2.5 = 17.5$

3. **A**

4. An annual pass covering entrance fees to more than 2,000 national parks costs \$80. If the total income from the annual passes is \$12,800 in one month, which equation can you use to find the number of passes purchased that month?

F. $12,800p = 80$

H. $80p = 12,800$

G. $12,800 - p = 80$

J. $80 + p = 12,800$

4. **H**

5. What is the solution to $7x - 10x = 9$?

A. $x = 3$

B. $x = -3$

C. $x = \frac{1}{3}$

D. $x = -\frac{1}{3}$

5. **B**

6. What value of m makes the equation $\frac{1}{15} = \frac{3}{5}m$ true?

F. $m = \frac{1}{3}$

G. $m = \frac{1}{9}$

H. $m = \frac{1}{5}$

J. $m = \frac{1}{25}$

6. **G**

7. Name the first step in solving $2x - 5 = 37$.

A. Add 5 to each side.

C. Divide each side by $2x$.

B. Subtract 5 from each side.

D. Multiply $2x$ to each side.

7. **A**

8. Solve $7x - 9 = -30$.

F. $x = -3$

G. $x = -1$

H. $x = 4$

J. $x = 6$

8. **F**

Test, Form 1A (continued)

9. What value of
- x
- makes the following equation true?

$$\frac{1}{9}x + 3 = -1$$

- A.
- $x = -18$
- B.
- $x = -13$
- C.
- $x = -4$
- D.
- $x = -36$

9. **D**

10. The statement,
- the difference of a number and 7 is -8*
- , is represented by which of the following equations?

- F.
- $7 - n = -8$
- H.
- $n - 7 = -8$
-
- G.
- $\frac{n}{7} = -8$
- J.
- $n - (-7) = -8$

10. **H**

11. Which equation can be used to represent the sentence,
- six less than the product of four and a number is -5*
- ?

- A.
- $6 - 4n = -5$
- C.
- $4n - 5 = 6$
-
- B.
- $-5 - 6 = -4n$
- D.
- $4n - 6 = -5$

11. **D**

12. A true crab has 4 fewer than twice the number of legs that a hermit crab has. The hermit crab has 6 legs. How many legs does the true crab have?

- F. 1 leg G. 4 legs H. 6 legs J. 8 legs

12. **J**

13. Laney buys 3 containers of yogurt. She has coupons for \$0.35 off the regular price of each container. After using the coupons, the total cost of the yogurt is \$3.45. What is the regular price of a container of yogurt?

- A. \$0.80 B. \$1.50 C. \$2.40 D. \$3.10

13. **B**

14. What is the solution of the equation
- $8x + 5 = 4x - 7$
- ?

- F.
- $x = -4$
- G.
- $x = -3$
- H.
- $x = -1$
- J.
- $x = 2$

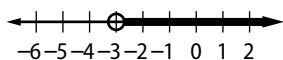
14. **G**

15. Fiona earns \$15 for each lawn she mows. Which inequality can be used to find out how many lawns she must mow to earn at least \$135?

- A.
- $15m < 135$
- C.
- $15m \geq 135$
-
- B.
- $15m \leq 135$
- D.
- $15m > 135$

15. **C**

16. Which inequality is graphed on the number line shown?



- F.
- $x < -3$
-
- G.
- $x \leq -3$
-
- H.
- $x \geq -3$
-
- J.
- $x > -3$

16. **H**