

2.4.28 The Multiplication Principle of Equality 2

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Solve.

1) $4a = -32$ 1) _____
A) -8 B) 36 C) 1 D) -36

2) $\frac{7}{8}x = 56$ 2) _____
A) $\frac{441}{8}$ B) 64 C) 49 D) $\frac{455}{8}$

3) $-\frac{4}{9}m = \frac{1}{2}$ 3) _____
A) $\frac{9}{8}$ B) $-\frac{9}{2}$ C) $-\frac{9}{8}$ D) $-\frac{8}{9}$

4) $6r + 3 = 51$ 4) _____
A) 42 B) 46 C) 8 D) 5

5) $4(6x - 1) = 16$ 5) _____
A) $\frac{5}{8}$ B) $\frac{17}{24}$ C) $\frac{5}{6}$ D) $\frac{1}{2}$

6) $17x + 3(x + 1) = 20(x + 1) - 17$ 6) _____
A) no solution B) 0
C) all real numbers D) 1

Use the multiplication principle of equality to eliminate the fractions or decimals; then solve.

7) $\frac{7}{4}x + \frac{9}{2} = \frac{3}{2}x$ 7) _____
A) -24 B) 24 C) 18 D) -18

8) $\frac{1}{3}x + 2 = \frac{1}{6}x + \frac{4}{3}$ 8) _____
A) -12 B) 3 C) -4 D) 4

9) $\frac{1}{5}(y + 2) = \frac{4}{5} - y$ 9) _____
A) 1 B) $-\frac{1}{2}$ C) -1 D) $\frac{1}{3}$

10) $1.3x - 2.5 = 0.8x - 0.55$ 10) _____
A) 3.9 B) 4.29 C) -0.256 D) 4

Solve.

11) $5 - 8x = 4x - 3x - 49$

A) $\frac{44}{7}$

B) $\frac{49}{9}$

C) 6

D) 7

11) _____

Use the multiplication principle of equality to eliminate the fractions or decimals; then solve.

12) $0.4 - 8.3y - 2.7y = 1 - 11y - 0.6$

A) 0.4

B) -11

C) all real numbers

D) no solution

12) _____

Solve.

13) $2x + 2 + 4(x + 1) = 3x - 2$

A) $\frac{9}{8}$

B) $-\frac{2}{5}$

C) $-\frac{8}{3}$

D) 3

13) _____

14) $4(x - 3) - 20 = 6x - 2(x - 2)$

A) all real numbers

B) no solution

C) -24

D) -16

14) _____

Use the multiplication principle of equality to eliminate the fractions or decimals; then solve.

15) $1.2x + 4.1 = 0.6x + 2.96$

A) -2

B) 0.526

C) -1.9

D) -2.09

15) _____

Solve the problem.

16) The perimeter of a rectangular garden is to be 64 ft. Find the length if the width is 8 ft. (Use $P = 2l + 2w$)

A) 24 ft.

B) 22 ft.

C) 21 ft.

D) 23 ft.

16) _____

17) The area of a rectangular garden is to be 98 ft.². Find the length if the width must be 7 ft. (Use $A = lw$)

A) 16 ft.

B) 91 ft.

C) 13 ft.

D) 14 ft.

17) _____

Answer Key

Testname: UNTITLED1

- 1) A
- 2) B
- 3) C
- 4) C
- 5) C
- 6) C
- 7) D
- 8) C
- 9) D
- 10) A
- 11) C
- 12) C
- 13) C
- 14) B
- 15) C
- 16) A
- 17) D