2.4.28 The Multiplication Principle of Equality 3

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

Solve.

1) $8a = -48$ 1) _____

A) -6 B) 56 C) 1 D) -56

2) $\frac{4}{5}x = 8$ 2) _____

A) $\frac{36}{5}$ B) 10 C) $\frac{32}{5}$ D) $\frac{44}{5}$

3) $\frac{2}{3}x = -\frac{7}{8}$ 3) _____

A) $\frac{21}{16}$ B) $-\frac{21}{8}$ C) $-\frac{21}{16}$ D) $-\frac{16}{21}$

4) $10r + 5 = 65$ 4) _____

A) 50 B) 54 C) 6 D) 1

5) $5(3x - 1) = 20$ 5) _____

A) $\frac{19}{15}$ B) $\frac{7}{5}$ C) $\frac{5}{3}$ D) 1

6) $5x + 6(x + 1) = 11(x + 1) - 5$ 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) $\frac{7}{10}x + \frac{8}{5} = \frac{3}{5}x$ 7) _____

A) -22 B) 22 C) 16 D) -16

8) $\frac{1}{5}x + \frac{6}{5} = \frac{1}{7}x + \frac{8}{7}$ 8) _____

A) -2 B) 2 C) -1 D) 1

9) $\frac{1}{4}(y + 5) = \frac{3}{4} - y$ 9) _____

A) -1 B) $\frac{2}{3}$ C) 1 D) $-\frac{2}{5}$

10) $1.2x + 4.7 = 0.8x + 2.94$ 10) _____

A) -4.4 B) -3.96 C) 0.227 D) -4.3

Solve.

11) $10 - 10x = 5x - 8x - 39$ 11) _____

A) $\frac{29}{13}$ B) $\frac{39}{7}$ C) 7 D) 3

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

12) $0.4 - 8.9y - 2.6y = 1 - 11.5y - 0.6$ 12) _____

A) 0.4 B) −11.5

C) all real numbers D) no solution

Solve.

13) $7x - 7 - 2(x + 1) = 6x + 7$ 13) _____

A) $\frac{11}{8}$ B) $\frac{1}{5}$ C) − 16 D) 6

14) $-4(x + 3) + 93 = 3x - 7(x - 9)$ 14) _____

A) all real numbers B) no solution

C) 30 D) 156

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

15) $1.5x + 2.9 = 0.8x - 1.51$ 15) _____

A) −6.2 B) 0.159 C) −6.3 D) −5.67

Solve the problem.

16) The perimeter of a rectangular garden is to be 44 ft. Find the length if the width is 6 ft. (Use $P = 2l + 2w$) 16) _____

A) 16 ft. B) 14 ft. C) 13 ft. D) 15 ft.

17) The area of a rectangular garden is to be 170 ft.^{2}. Find the length if the width must be 10 ft. (Use $A = lw$) 17) _____

A) 19 ft. B) 160 ft. C) 16 ft. D) 17 ft.

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