2.12 Solving Linear Equations One Variable 2

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

Write the sentence as an equation.

1) The product of -2 and -18 equals 36. 1) _____

A) -2 - 18 = 36 B) -2(-18) = 36 C) $\frac{-2}{-18} = 36$ D) 2(18) = 36

2) The quotient of -63 and 7 gives -9. 2) _____

A) -63 + 7 = -9 B) -63(7) = -9 C) -63 - 7 = -9 D) $\frac{-63}{7} = -9$

3) The sum of -43 and 37 amounts to -6. 3) _____

A) -43 - 37 = -6 B) 43 + 37 = -6 C) -43 + 37 = -6 D) 43 + 37 = 6

4) The difference of -21 and 20 is -41. 4) _____

A) 21 - 20 = 41 B) -21 - 20 = 41 C) 21 + 20 = 41 D) -21 - 20 = -41

Solve the equation.

5) 24 - 9x = -3x 5) _____

A) -4 B) 4 C) 144 D) -144

6) 4(5x + 2) + 11 = 18x + 3 6) _____

A) -8 B) -32 C) 8 D) -16

7) 3x - 8x = -27 - 13 7) _____

A) -5 B) 8 C) 5 D) -8

8) -8x - 24 = -6x - 6 8) _____

A) -12 B) -9 C) 12 D) 9

9) 5 + 30 = x + 6 9) _____

A) 29 B) -41 C) -29 D) 41

10) $\frac{n}{-5} = 4 - (-9)$ 10) _____

A) -25 B) 25 C) 65 D) -65

11) $|-16| + 6^2 = 20y - |-38| - 19y$ 11) _____

A) -14 B) 14 C) 90 D) -90

12) 8x - 1 = 9(x + 6) 12) _____

A) 55 B) -55 C) -53 D) 53

13) $\frac{x}{2} + 39 = 0$ 13) _____

A) 78 B) $\frac{39}{2}$ C) $-\frac{39}{2}$ D) -78

14) $\frac{y}{12} = (-8)^2 - |25| + (-5)^2$ 14) _____

A) 768 B) 1368 C) -168 D) -768

15) $19 = 9x + 10$ 15) _____

A) 4 B) 1 C) 7 D) 0

16) $3y + 7 = 2y - 8$ 16) _____

A) -16 B) -1 C) -15 D) -14

17) $3^3 = x + 4^4$ 17) _____

A) -283 B) 283 C) -229 D) 229

18) $2(y + 2) = 3(y - 5)$ 18) _____

A) -19 B) -11 C) 19 D) 11

19) $5(2x - 2) = 8x$ 19) _____

A) -5 B) 1 C) 5 D) -1

20) $5(x + 5) = 20$ 20) _____

A) 9 B) -9 C) 1 D) -1

21) $-8 + 22 = 15x - 2 - 14x$ 21) _____

A) 12 B) 28 C) -12 D) 16

22) $x - 6 = -2 - 24$ 22) _____

A) 20 B) -32 C) 32 D) -20

23) $2(3x - 4) = 10x$ 23) _____

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

24) $\frac{x}{-13} = 3^5 - 5^6$ 24) _____

A) 199,966 B) -199,966 C) 39,572 D) -39,572

Write the sentence as an equation. Use x to represent "a number."

25) Five subtracted from nine times a number is equal to 67. 25) _____

A) $9x - 5 = 67$ B) $9(x - 5) = 67$ C) $5 - 9x = 67$ D) $5(9 - x) = 67$

26) Four subtracted from a number is equal to 62. 26) _____

A) $4 + x = 62$ B) $4 - x = 62$ C) $x - 4 = 62$ D) $62 - 4 = x$

27) The quotient of 10 and a number equals 5. 27) _____

A) $\frac{x}{10} = 5$ B) $10 - x = 5$ C) $10x = 5$ D) $\frac{10}{x} = 5$

28) A number added to -7 is equal to -15. 28) _____

A) x - 15 = -7 B) -7 + x = -15 C) x = -7 + 15 D) -7 - 15 = x

Write the phrase as a variable expression. Use x to represent "a number."

29) the difference of Seven and a number 29) _____

A) x - 7 B) 7x C) $\frac{7}{x}$ D) 7 - x

30) Twice a number, decreased by 30 30) _____

A) x - 60 B) 2(x - 30) C) 2 + x - 30 D) 2x - 30

31) The quotient of 41 and the product of a number and -7 31) _____

A) -287x B) $\frac{41}{-7x}$ C) $\frac{-7x}{41}$ D) $\frac{41}{x}$ - 7

32) The quotient of 3 and a number, added to -23 32) _____

A) $-23 + \frac{3}{x}$ B) 3 + x + (-23) C) $-23 + \frac{x}{3}$ D) $\frac{3}{x + (-23)}$

Solve.

33) Jordan sold his used lawn tractor and accessories for $980. If he received nine times as much money for the lawn tractor as he did for the accessories, find how much money he received for the lawn tractor. 33) _____

A) $108 B) $882 C) $8820 D) $98

34) The product of a number and -6 amounts to five times the sum of that number and 33. Find the number. 34) _____

A) -15 B) -6 C) 6 D) 15

35) The sum of 3, 4, and a number amounts to 14. Find the number. 35) _____

A) 7 B) 21 C) 15 D) 13

36) The product of 11 and a number equals 99. Find the number. 36) _____

A) 10 B) 88 C) 9 D) 1089

Answer Key
Testname: 2.12 SOLVING LINEAR EQUATIONS ONE VARIABLE 2

1) B
2) D
3) C
4) D
5) B
6) A
7) B
8) B
9) A
10) D
11) C
12) B
13) D
14) A
15) B
16) C
17) C
18) C
19) C
20) D
21) D
22) D
23) B
24) A
25) A
26) C
27) D
28) B
29) D
30) D
31) B
32) A
33) B
34) A
35) A
36) C