

2.12 Solving Linear Equations One Variable 1

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

Solve the equation.

1) $\frac{y}{10} = (-9)^2 - |23| + (-3)^2$ 1) _____

- A) 670 B) 1130 C) -490 D) -670

2) $3^3 = x + 5^5$ 2) _____

- A) -3152 B) 3152 C) -3098 D) 3098

3) $\frac{x}{-11} = 4^6 - 6^6$ 3) _____

- A) 468,160 B) -468,160 C) 74,272 D) -74,272

4) $|-12| + 9^2 = 50y - |-38| - 49y$ 4) _____

- A) -55 B) 55 C) 131 D) -131

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

5) the difference of Four and a number 5) _____

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

6) The quotient of 31 and the product of a number and -8 6) _____

- A) $-248x$ B) $\frac{31}{-8x}$ C) $\frac{-8x}{31}$ D) $\frac{31}{x} - 8$

7) Twice a number, decreased by 34 7) _____

- A) $x - 68$ B) $2(x - 34)$ C) $2 + x - 34$ D) $2x - 34$

8) The quotient of 4 and a number, added to -23 8) _____

- A) $-23 + \frac{4}{x}$ B) $4 + x + (-23)$ C) $-23 + \frac{x}{4}$ D) $\frac{4}{x + (-23)}$

Solve the equation.

9) $2(5x - 2) = 8x$ 9) _____

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

10) $-17 = 2x - 3$ 10) _____

- A) -12 B) -7 C) 5 D) -16

11) $3(6x - 4) = 22x$ 11) _____

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

12) $-54 - 8x = -2x$ 12) _____

- A) 9 B) -9 C) -324 D) 324

2.12 Solving Linear Equations One Variable 1

13) $5 + 30 = x + 10$

A) 25

B) -45

C) -25

D) 45

13) _____

14) $\frac{n}{-6} = 4 - (-2)$

A) 12

B) -12

C) 36

D) -36

14) _____

15) $x - 13 = -5 - 26$

A) 18

B) -44

C) 44

D) -18

15) _____

16) $8x - 15x = -44 - 12$

A) -7

B) 8

C) 7

D) -8

16) _____

17) $3(5x + 4) - 20 = 13x - 4$

A) 2

B) 8

C) -2

D) 4

17) _____

18) $2(y + 5) = 3(y - 8)$

A) -34

B) -14

C) 34

D) 14

18) _____

19) $7x - 5 = 8(x + 3)$

A) 29

B) -29

C) -19

D) 19

19) _____

20) $3(x + 1) = 12$

A) 5

B) -5

C) -3

D) 3

20) _____

21) $-8 + 22 = 13x - 5 - 12x$

A) 9

B) 25

C) -9

D) 19

21) _____

22) $-8x + 10 = -6x + 6$

A) 5

B) 2

C) -5

D) -2

22) _____

23) $\frac{x}{8} + 25 = 0$

A) 200

B) $\frac{25}{8}$

C) $-\frac{25}{8}$

D) -200

23) _____

24) $7y - 28 = 8y - 14$

A) -15

B) -6

C) -14

D) -13

24) _____

Write the sentence as an equation.

25) The difference of -40 and 7 is -47.

A) $40 - 7 = 47$

B) $-40 - 7 = 47$

C) $40 + 7 = 47$

D) $-40 - 7 = -47$

25) _____

26) The sum of -32 and 39 is equal to 7.

A) $-32 - 39 = 7$

B) $32 + 39 = 7$

C) $-32 + 39 = 7$

D) $32 + 39 = -7$

26) _____

2.12 Solving Linear Equations One Variable 1

27) The quotient of -88 and 8 equals -11.

A) $-88 + 8 = -11$

B) $-88(8) = -11$

C) $-88 - 8 = -11$

D) $\frac{-88}{8} = -11$

27) _____

28) The product of -20 and -31 yields 620.

A) $-20 - 31 = 620$

B) $-20(-31) = 620$

C) $\frac{-20}{-31} = 620$

D) $20(31) = 620$

28) _____

Solve.

29) Ben sold his used snow plow and accessories for \$352. If he received seven times as much money for the snow plow as he did for the accessories, find how much money he received for the snow plow.

A) \$54

B) \$308

C) \$2464

D) \$44

29) _____

30) The product of 9 and a number yields 45. Find the number.

A) 6

B) 36

C) 5

D) 405

30) _____

31) The sum of 2, 6, and a number amounts to 15. Find the number.

A) 7

B) 23

C) 19

D) 11

31) _____

32) The product of a number and -8 gives eight times the sum of that number and 36. Find the number.

A) -18

B) -8

C) 8

D) 18

32) _____

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

33) Seven subtracted from twice a number gives 17.

A) $2x - 7 = 17$

B) $2(x - 7) = 17$

C) $7 - 2x = 17$

D) $7(2 - x) = 17$

33) _____

34) A number added to -19 is equal to -21.

A) $x - 21 = -19$

B) $-19 + x = -21$

C) $x = -19 + 21$

D) $-19 - 21 = x$

34) _____

35) Ten subtracted from a number yields 15.

A) $10 + x = 15$

B) $10 - x = 15$

C) $x - 10 = 15$

D) $15 - 10 = x$

35) _____

36) The quotient of 24 and a number is 4.

A) $\frac{x}{24} = 4$

B) $24 - x = 4$

C) $24x = 4$

D) $\frac{24}{x} = 4$

36) _____

Answer Key

Testname: 2.12 SOLVING LINEAR EQUATIONS ONE VARIABLE 1

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