

2.3.28 The addition Principle of Equality1

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

Determine whether the given equation is linear.

1) $x^2 + y^2 = 2$ 1) _____
A) Linear B) Not Linear

2) $8n + 9 = 7n + 2(n - 8)$ 2) _____
A) Linear B) Not Linear

3) $7x + 2y = 5$ 3) _____
A) Linear B) Not Linear

Solve.

4) $6z + 19 = 5z + 3$ 4) _____
A) 16 B) 22 C) -16 D) -22

5) $7p - 8 = 8p - 7$ 5) _____
A) -2 B) 0 C) -1 D) -3

6) $-12 = n - 4$ 6) _____
A) 8 B) 16 C) -16 D) -8

7) $-5x + 4 + 6x = 0$ 7) _____
A) 4 B) no solution C) -4 D) 2.25

8) $-8b + 9 + 6b = -3b + 14$ 8) _____
A) -9 B) 14 C) 5 D) -14

9) $s + \frac{1}{2} = \frac{9}{10}$ 9) _____
A) $\frac{4}{5}$ B) $\frac{2}{5}$ C) 4 D) $\frac{7}{5}$

10) $3(2z - 2) = 5(z + 5) + z$ 10) _____
A) 19 B) 31
C) All real numbers D) No solution

11) $7y - 2(y - 1) = 8y - (4y + 12)$ 11) _____
A) 14 B) -14 C) 10 D) -10

12) $6.8p - 12 = 5.8p - 8$ 12) _____
A) 5 B) -3 C) 4 D) 3

13) $5(2z - 9) = 9(z - 5) + z$ 13) _____
A) 0 B) 90
C) All real numbers D) No solution

Translate into an equation, then solve.

- 14) Betsy has a balance of $-\$493$ on her credit card. What payment should she make to get the balance to $-\$184$? 14) _____
- A) $-184 + x = -493$; A payment of $\$309$ must be made.
 - B) $-184 + x = -493$; A payment of $\$409$ must be made.
 - C) $-493 + x = -184$; A payment of $\$409$ must be made.
 - D) $-493 + x = -184$; A payment of $\$309$ must be made.
- 15) Ken is to receive 660 cc of insulin in three injections. The first injection is to be 175 cc. The second injection is to be 250 cc. How much insulin must be given for the third injection? 15) _____
- A) $175 - 250 + x = 660$; The third injection must be 235 cc .
 - B) $175 + 250 + x = 660$; The third injection must be 735 cc .
 - C) $175 - 250 + x = 660$; The third injection must be 735 cc .
 - D) $175 + 250 + x = 660$; The third injection must be 235 cc .

Answer Key

Testname: UNTITLED1

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