

Which (if any) of the given values is a solution of the open sentence?

1. $-7r = 5r + 8$ -4, 2, 4
2. $(b - 2)2 - 1 = 3(b - 1) - 2b$ -4, -2, 2

Solve:

3. $m + 6 = -6$
4. $2b = 1244$
5. $7f = 1$

Lessons 3.3 - 3.4
Quiz - Form A

Unit 3

Solve:

1. $7z + 8 - 32 = -16$

2. $-12x - 5 - 2x = 7 + 1$

3. $y + 6 = 7 - 3y$

4. $a + 12 - 1 = -2a + 7$

5. $6x + 24 = 10x - 20 + 4$

Lessons 3.3 - 3.4
Quiz - Form B

Unit 3

Solve:

1. $-7d + 13 - 1 = 5$

2. $19x + 6 - 5x = 2 + 9$

3. $-13 + 5y = y - 10$

4. $5a + 2 - 8 = 12 + 2a$

5. $c - 3 - 5c = -4 + 11c + 2$

Lessons 3.5 - 3.6
Quiz - Form A

Unit 3

Solve:

1. $2x - 3(7 - 3x) = 2(x - 8)$
2. $-(3 + 2y) + 7y = (2y - 3)2$
3. $3 - 2(4 + 3z) = -(6 + 2z)$

Write using mathematical symbols:

4. 5 more than twice a number
5. 3 less than 6 times 4, decreased by 4

Lessons 3.5 - 3.6
Quiz - Form B

Unit 3

Solve:

1. $-5 - 2x + 13 = 3x + 2(x + 2)$
2. $-2y + 3(-5 - y) = -4(2 - y)$
3. $2(5x + 3) - 1 = 4 + 3(2x + 3)$

Write using mathematical symbols:

4. 8 more than twice a number
5. 4 less than 5 times 3, decreased by 2

Write an equation and solve it:

1. Three less than twice Mike's age is 9. Find Mike's age.
2. If Mary's savings is increased by 5 times her savings, the result is \$180,000. How much does Mary have in savings?
3. If 3 is added to 11 less than 4 times Bob's age, the result is 12. Find Bob's age.
4. Mike had an archery score 3 times Bill's score. Together they scored 240. Find their archery scores.
5. The greater of two numbers is 4 more than the smaller. If three times the smaller is added to the greater, the result is 32. Find the two numbers.

Write an equation and solve it:

1. Eight less than three times Martha's age is 46. Find Martha's age.
2. If Jean's savings is increased by 4 times her savings, the result is \$13,000. How much does Jean have in savings?
3. If 5 is added to 9 less than 3 times Dave's age, the result is 38. Find Dave's age.
4. Bob had an archery score 2 times Fred's score. Together they scored 213. Find their archery scores.
5. The greater of two numbers is 7 more than the smaller. If three times the smaller is added to the greater, the result is 67. Find the two numbers.

Lesson 3.9 - Review of Unit 3
Quiz - Form A

Unit 3

Solve:

1. The length of a rectangle is 8 less than 3 times the width. The perimeter is 28. Find the length and width.
2. The first side of a triangle is $\frac{1}{3}$ the second. The third side is twice the second. The perimeter is 10. Find each side.
3. The base of an isosceles triangle is 5 more than half of one of the sides. The perimeter is 15. Find each side.

Solve each equation:

4. $-x + 7 - x = 3x + x - 2$
5. $3x + 2(x + 2) = 13 - 2x - 5$
6. $5(1 - b) + 8b = -6 + 4b$

Write an equation and solve each problem:

7. A number decreased by 37 is the same as 2 times the number decreased by 210. Find the number.
8. The second of three numbers is 5 less than 4 times the first. The third is 11 less than 7 times the first. If twice the first is decreased by the third, the result is -4. Find the three numbers.

Lesson 3.9 - Review of Unit 3
Quiz - Form B

Unit 3

Solve:

1. The base of an isosceles triangle is 4 more than half of one of the sides. The perimeter is 24. Find each side.
2. The length of a rectangle is 5 less than 2 times the width. The perimeter is 34. Find the length and width.
3. The first side of a triangle is $\frac{1}{2}$ the second. The third side is three times the second. The perimeter is 18. Find each side.

Solve each equation:

4. $2x - 5 + x = -1 + 3 - 5x$
5. $-4x + 9 - 3 = 2(2x - 1) + 2x$
6. $7b - 2 = 3b + 4(1 - b)$

Write an equation and solve each problem:

7. Two times a number decreased by 197 is the same as the number decreased by 81. Find the number.
8. The second of three numbers is 3 less than 3 times the first. The third is 9 less than 4 times the first. If twice the first is decreased by the third, the result is 5. Find the three numbers.

Which (if any) of the given values is a solution of the open sentence?

1. $7m - 18 = 3$ -2, 2, 3
2. $19 - 2p = 3p - 1$ 0, 4, -3
3. $3x - 5 + x = 2x + 9$ -4, 0, 5
4. $\frac{2d - 12}{d - 2} = 4$ -2, 5, -4

Solve each equation:

5. $6 + x = 6$
6. $4 + x = 8$
7. $-2 + x = -14$
8. $17 + m = 64$
9. $-30 - 38 = -26 + c + (-2)$
10. $9m = -63$
11. $-a = 7$
12. $-2 = -9y$
13. $-64a = -8$
14. $-2b = 3426$
15. $6a - 48 = 6$
16. $5y + 6 = -6$
17. $-x + 6 = 9$
18. $b + 15 - 4b = 8 + 6$

Write with math symbols:

19. Eight more than 9
20. Six less than 17

Solve each word problem:

21. A number decreased by 12 is 16. Find the number.
22. Nine less than twice Bob's age is 45. Find Bob's age.
23. If 6 is increased by 3 times a number, the result is 51. Find the number.
24. If 2 times Kim's age is increased by 7 times her age, the result is 63. Find Kim's age.
25. When 8 less than twice Wendy's age is decreased by 11, the result is Wendy's age. Find Wendy's age.

Which (if any) of the given values is a solution of the open sentence?

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|--------------------------------|----------|
| 1. $17 - 3x = 4$ | 5, -7, 3 |
| 2. $13 - 5x = -3x + 7$ | 3, 1, -2 |
| 3. $7x - 22 = 66x - 18$ | 0, 4, 3 |
| 4. $\frac{3x + 8}{1 - 2x} = 2$ | -1, 5, 2 |

Solve each equation:

- | | |
|---------------------------------|-----------------------------|
| 5. $9 + y = 9$ | 12. $-4 = -9y$ |
| 6. $6 + z = 12$ | 13. $-54x = -9$ |
| 7. $-4 + x = -16$ | 14. $1554 = -3x$ |
| 8. $13 + n = 52$ | 15. $6a - 48 = 6$ |
| 9. $8r = -72$ | 16. $7z + 8 - 32 = -16$ |
| 10. $-14 - 53 = -19 + c + (-3)$ | 17. $-12x - 5 - 2x = 7 + 1$ |
| 11. $-c = 9$ | 18. $10 = 3y + 18 - 5y$ |

Write with math symbols:

- | | |
|------------------------|--------------------------|
| 19. Twelve less than 9 | 20. Fourteen more than 6 |
|------------------------|--------------------------|

Solve each word problem:

- A number decreased by 7 is 24. Find the number.
- Two times a number, increased by 3 more than the same number is 15. Find the number.
- Two more than 3 times a number, increased by 13 is 24. Find the number.
- Three less than 4 times a number, decreased by 5 is 16. Find the number.
- If 7 is added to 6 less than 8 times Kena's age, the result is 33. Find Kena's age.