

Simplify

1. $6 - 2(4 + 3)$

2. $2 - 20 \div 5 \cdot 3$

3. Simplify $4x - 3y + 7x - 6y + 12$ by combining like terms.

4. Which of the following sets does the number -17 belong to?

- whole numbers
 - integers
 - rational numbers
 - irrational numbers
 - real numbers
 - none of the above
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5. Use the commutative and/or associative properties to simplify $\frac{1}{3} \cdot 23 \cdot 3$.

6. Simplify: $11(3x - 6) - 3(x - 1)$

Solve:

7. $x + 34 = 73$

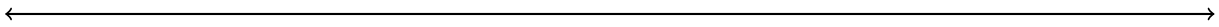
8. $-0.5x = 25$

9. $3x - 7 = -19$

10. $-16 + 5x = -7(-6 + 8x) + 3$

11. Solve the inequality $6 \leq -3(x + 2)$ and write the solution in interval notation.

12. Solve the inequality $x + 7 < 15$ and graph the solution.



13. Solve the formula $12x - 4y = 16$ for y .

14. List out all of the divisors of 24.

15. Find the least common multiple of 40 and 12.

Perform the following operations.

16. $\frac{4}{15} + \frac{b}{5}$

17. $\frac{21a}{4} \div \frac{7a}{5}$

Solve:

18. $\frac{x}{12} + \frac{5}{6} = -\frac{3}{4}$

19. $11x - \frac{2}{7} - 10x = -\frac{13}{14}$

20. $\frac{3}{x-3} - \frac{1}{2} = 5$