

Equations Review

1. What is an equation?
 2. What is a solution to an equation?
 3. What does it mean to check the solution to an equation?
 4. What is a coefficient?
 5. What are inverse operations?
 6. How do inverse operations help to solve an equation?
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Solve and check.

1. $x + 15 = -20$

2. $\frac{m}{-0.6} = -5$

3. $-9n = -72$

4. $\frac{3}{4}a = -12$

5. $\frac{x}{2} + 3 = -9$

6. $-3n - 6 = -30$

7. $2 - 6m = 32$

8. $0.8a + 3.4 = -7.2$

9. Write a two-step equation whose solution is 10.
10. Karen solved the equation $2x - 4 = -16$ and got $x = -10$ as a solution. Without solving, determine if she is correct.
11. A certain number is multiplied by nine and 12 is added to the product. The total is 57. What is the number?
12. When 10 is subtracted from the quotient of a number divided by 4, the difference is 2. What is the number?

Solve and check:

13. $-2w + 14 + 10w = 34$

14. $7 + 4(2a + 15) = -13$

15. $5n - 2 = n + 18$

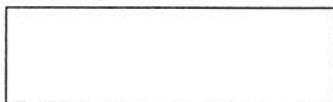
16. $7m + 32 = 12 - m$

17. $2(4 + 3n) = 12n - 16$

18. $-3(8 - 2x) = 4(x + 2)$

19. Write an equation and solve for x if the area of the rectangle is 100 square centimeters.

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$2x + 4$