Assignment

Write

Describe what it means to solve an equation.

Remember

When solving an equation, equality must be maintained. What is done to one expression must be done to the equivalent expression to maintain equality.

Practice

Solve each equation using a double number line.

1. $4x + 12 = 24$
2. $-8x + 25 = -15$
3. $-5x - 12 = 18$
4. $40x + 55 = 695$
5. $-8 = 2x - 14$
6. $11x + 13 = -9$

Stretch

What operation(s) could you use to solve the equation $x^2 + 5 = 86$. What is the solution?

Review

1. During the summer, Matthew and Devan started their own business mowing lawns for people in the Lake Section. Before starting any work, Matthew spends $15 to fill up the gas tank for the lawnmower. The boys agree that each person will earn the same amount after Matthew is reimbursed the money he spent for gas. After a week of work, the boys earn a total of $243. Matthew filled up the gas tank just once. How much did each boy earn?
   a. Draw a bar model to represent the situation.
   b. Write an equation to represent the situation.
   c. Use the model to solve the problem.
2. Evaluate each algebraic expression for the variable.
   a. $9g + 5$, for $g = 1.5$
   b. $\frac{2x + 3}{4}$, for $x = 1$
3. Determine each product.
   a. $-6.2(9.1)$
   b. $-0.03(-15)$