

Name:

Date:

Variables on Both Sides

1. Solve the equations. Check by substituting your solution to the equation.

a. $2x + 3 = x$

b. $7x - 9 = 4x$

c. $8x + 10 = 2x - 8$

d. $-2x + 3 = 17 + 9x$

e. $10x - 2 = -4x + 40$

f. $14 + 2x = -6 - 3x$

g. $-100y + 30 = 120y + 90$

h. $20 - 10x = 50 + 6x + 10$

i. $-14 - x = -9 - 5x + 4x$

j. $-14y - 6 - 2y = -8y - 9$

k. $8t - 10 - 2t = -6t + 10 + 9t$

l. $2x - 9 + 6x = 9 - 15x$

2. Write an equation and solve.

a. When you multiply a number s by 9 and add 5, the result is the same as the product of the number s and 7.

b. The sum of $3x$ and 14 equals the difference of 20 and $2x$.

c. The product of number x and -6 is equal to the sum of the same number x and 21.