7.2

Solving Equations Using Addition or Subtraction

Example 3 $x + 9 = 14$

Example 4

$$x - 7 + 7 = 6 + 7$$

Example 5

$$x - 12 = 51$$

Example 6

$$x + 9 = 28$$

Example 7

$$x - 8 = 38$$

Example 8

$$3 = x - 4$$

Example 9

$$x - (-3) = 9$$

Example 10

$$x + (-7) = 3$$

Solving Adding and Subtraction with Integers

1) $x - 9 = -12$

2) $x + (-3) = 7$

3) $x + 9 = -4$

4) $x - (-7) = 5$

Solving Adding and Subtraction with Integers

5) $-6 = x - 15$

6) $7 = x + (-9)$

Practice

Tell whether the given value is a solution of the equation.

a. $p + 10 = 38;\ p = 18$

b. $4y = 56;\ y = 14$

Real-Life Application

Your parents give you $20 to help buy the new pair of shoes shown. After you buy the shoes, you have $5.50 left. Write and solve an equation to find how much money you had before your parents gave you $20.

Words

The starting amount	plus	the amount your parents gave you	minus	the cost of the shoes	is	the amount left.

Variable

Let s be the starting amount.

Classwork

1) $m+19=37$	2) $r-17=46$	2) $15+b=23$
4) $27=d-19$	5) $q-8=43$	6) $u-8.4=12.1$
7) $e+5.5=17.3$	8) $1.2=z-2.5$	9) $j-\frac{1}{2}=\frac{3}{4}$

10) $m+4=-12$	11) $k-9=-13$	12) $f-27=19$
13) $-16+x=-15$	14) $n-8=-10$	15) $-17=x-15$