## **Section Overview**

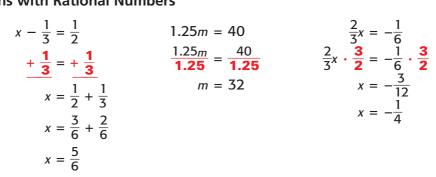


Lesson 2-7

## **Algebra with Rational Numbers**

Why?) Most real-world applications involve rational numbers.

**Solving Equations with Rational Numbers** 



## **Two-Step Equations**

Why?) You can solve some problems by using two-step equations.

Jill's auto repair bill was \$225.

The parts cost \$95 and the labor cost \$52 per hour. For how many hours of labor was Jill charged?

```
Solve
total bill = parts + labor
\begin{array}{rrrr} 225 &=& 95 + 52h \\ - 95 & & -95 \\ \hline 130 &=& 52h \\ \hline \frac{130}{52} &=& \frac{52h}{52} \\ 2.5 &=& h \end{array}
```

## Check

225 = 95 + 52h  $225 \stackrel{?}{=} 95 + 52(2.5)$   $225 \stackrel{?}{=} 95 + 130$  $225 \stackrel{?}{=} 225 \checkmark$ 

Jill was charged for 2.5 hours of labor.

Lesson 2-8