

**LESSON** **Puzzles, Twisters & Teasers**

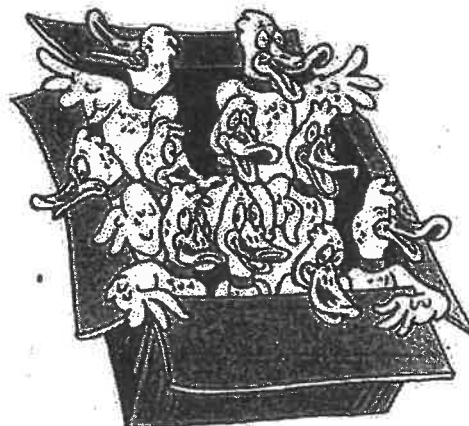
**2-5** **A Bold Conclusion!**

Solve each equation. Then use the boldfaced letters to answer the riddle.

- Q  $9y = 900$  \_\_\_\_\_
- A  $d - 15 = 45$  \_\_\_\_\_
- U  $j + 56 = -7$  \_\_\_\_\_
- C  $v - 39 = -16$  \_\_\_\_\_
- F  $w + 41 = 0$  \_\_\_\_\_
- K  $-85 = -5c$  \_\_\_\_\_
- X  $11y = -121$  \_\_\_\_\_
- E  $-23 = x + 35$  \_\_\_\_\_
- O  $200 = -25p$  \_\_\_\_\_
- R  $-20 = 2z$  \_\_\_\_\_
- B  $a - 25 = -5$  \_\_\_\_\_
- S  $s + 2 = -4$  \_\_\_\_\_
- W  $-5a = 300$  \_\_\_\_\_
- D  $k = -18 + 11$  \_\_\_\_\_
- G  $b - 7 = -16$  \_\_\_\_\_

What do you call ten ducks in a cardboard box?

- |     |     |    |     |    |     |     |    |
|-----|-----|----|-----|----|-----|-----|----|
| 60  | 20  | -8 | -11 | -8 | -41 |     |    |
| 100 | -63 | 60 | 23  | 17 | -58 | -10 | -6 |



## More Two-Step Equations

### Example 1

Solve  $6(x + 2) = 42$ . Check your solution.

$$\begin{aligned} 6(x + 2) &= 42 \\ \frac{6(x + 2)}{6} &= \frac{42}{6} \\ x + 2 &= 7 \\ \frac{-2}{-2} &= \frac{-2}{-2} \\ x &= 5 \end{aligned}$$

Write the equation.

Division Property of Equality  
Simplify.

Subtraction Property of Equality  
Simplify.

**Check**

$$\begin{aligned} 6(x + 2) &= 42 \\ 6(5 + 2) &\stackrel{?}{=} 42 \\ 6(7) &\stackrel{?}{=} 42 \\ 42 &= 42 \checkmark \end{aligned}$$

Write the original equation.

Replace  $x$  with 5.

Add. Multiply.

The solution checks.

The solution is 5.

### Exercises

Solve each equation.

1.  $7(x + 4) = 49$

2.  $2(x - 8) = -22$

CHECK:

CHECK:

3.  $10(x + 3) = -20$

4.  $25(x - 3) = 17$

CHECK:

CHECK: