

Puzzle 2-2

The Distributive Property

Use the distributive property to find the missing numbers in the equations.

$$1. \quad 8 \times (3 + 7) = (\square \times 3) + (8 \times \square)$$

A **T**

$$2. \quad 2 \times (11 + 18) = (2 \times \square) + (2 \times \square)$$

H **K**

$$3. \quad 4 \times (9 + 10) = (\square \times 9) + (4 \times \square)$$

N **Y**

$$4. \quad 5 \times (24 - 17) = (5 \times \square) - (\square \times \square)$$

Z **O** **E**

$$5. \quad (6 \times 3) + (6 \times 1) = \square \times (\square + \square)$$

S **F** **R**

$$6. \quad 9 \times (3 + 2 + 13) = (\square \times 3) + (9 \times \square) + (9 \times \square)$$

B **D** **W**

Now use your answers to discover some interesting facts about numbers and letters.

The letters $\frac{\quad}{8}$, $\frac{\quad}{3}$, $\frac{\quad}{11}$, $\frac{\quad}{18}$, $\frac{\quad}{4}$, and $\frac{\quad}{24}$ are written using three lines.

The word *four* has 4 letters. Because of this pattern, 4 is called

an $\frac{\quad}{11}$ $\frac{\quad}{5}$ $\frac{\quad}{4}$ $\frac{\quad}{17}$ $\frac{\quad}{6}$ $\frac{\quad}{7}$ number.