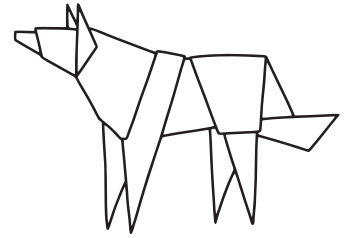


# Multiplication Strategies:

## 6, 7, 8, and 9



Factor	Strategy	Example
6	Multiply by 5 and add one group. (5 × ___) + (1 × ___)	$6 \times 4$ $= (5 \times 4) + (1 \times 4)$ $= 20 + 4$ $= 24$
7	Multiply by 5 and multiply by 2, then add the products. (5 × ___) + (2 × ___)	$7 \times 8$ $= (5 \times 8) + (2 \times 8)$ $= 40 + 16$ $= 56$
8	Multiply by 4 and double the product. (4 × ___) × 2	$8 \times 5$ $= (4 \times 5) \times 2$ $= 20 \times 2$ $= 40$
9	Multiply by 10 and subtract one group. (10 × ___) - (1 × ___)	$9 \times 6$ $= (10 \times 6) - (1 \times 6)$ $= 60 - 6$ $= 54$

**Directions:** Use the strategies to solve the multiplication problems below.

**Example:**  $8 \times 3$   
 $= (4 \times 3) \times 2$   
 $= 12 \times 2$   
 $= 24$

d.  $6 \times 7 = (5 \times 7) + (1 \times 7)$   
 $= 35 + 7$   
 $= 42$

a.  $7 \times 9 = (5 \times 9) + (2 \times 9)$   
 $= 45 + 18$   
 $= 63$

e.  $9 \times 5 = (10 \times 5) - (1 \times 5)$   
 $= 50 - 5$   
 $= 45$

b.  $7 \times 4 = (5 \times 4) + (2 \times 4)$   
 $= 20 + 8$   
 $= 28$

f.  $9 \times 8 = (10 \times 8) - (1 \times 8)$   
 $= 80 - 8$   
 $= 72$

c.  $6 \times 3 = (5 \times 3) + (1 \times 3)$   
 $= 15 + 3$   
 $= 18$

g.  $8 \times 4 = (4 \times 4) \times 2$   
 $= 16 \times 2$   
 $= 32$