

# THE DISTRIBUTIVE PROPERTY OF MULTIPLICATION

# ANSWERS

THE DISTRIBUTIVE PROPERTY OF MULTIPLICATION ALLOWS US TO DISTRIBUTE OR GIVE MULTIPLICATION TO ADDITION OR SUBTRACTION. IT MAKES NUMBERS EASIER TO WORK WITH AND ALLOWS US TO BREAK VARIABLES AND NUMBERS INTO PARTS.

## HELPFUL EXAMPLE

$4 \times 79$   $\Rightarrow$   $4 \times 79 = 4 \times (80 - 1)$

$4 \times 79$  CAN BE CHANGED TO  $4 \times (80 - 1)$ , BECAUSE  $79 = (80 - 1)$ .

$4 \times (80 - 1)$   $\Rightarrow$   $4 \times (80 - 1)$   $\Rightarrow$   $(4 \times 80) - (4 \times 1)$   $\Rightarrow$   $(320) - (4) = 316$

BY CHANGING THE 79 TO  $(80 - 1)$  WE CAN SOLVE THIS PROBLEM IN OUR HEAD.

USING THE DISTRIBUTIVE PROPERTY WE CAN SEPARATE THE 80 AND 1 AND MULTIPLY.

SEE HOW WE DISTRIBUTE THE 4 TO THE 80 AND 1?

NOW THE MULTIPLICATION IS EASIER AND CAN BE DONE IN OUR HEAD.  $320 - 4 = 316$ , SO  $4 \times 79 = 316$ .

Now you turn. Use the Distributive Property to solve the problems below.

1.  $7 \times 57 = 7 \times (50 + 7)$   
 $= (7 \times 50) + (7 \times 7)$   
 $= (350) + (49)$   
 $= 399$

2.  $8 \times 39 = \square \times (\square - \square)$   
**312**

3.  $4 \times 83$   
**332**

4.  $3 \times 79$   
**237**

5.  $6 \times 54$   
**324**

6.  $9 \times 48$   
**432**

7.  $11 \times 65$   
**715**

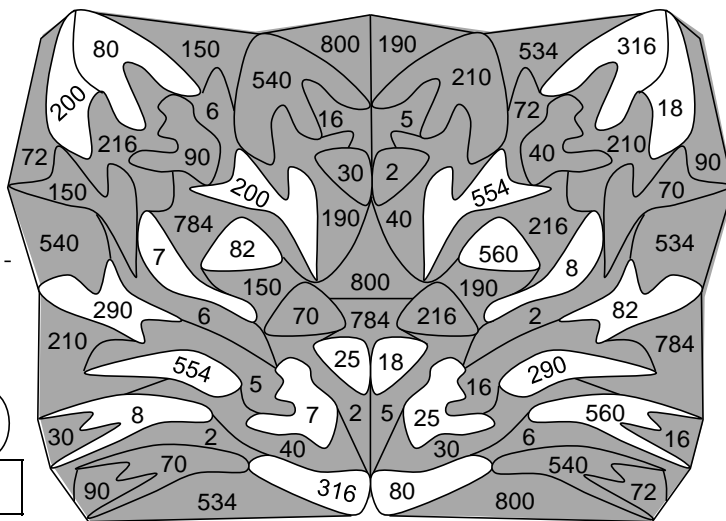
7.  $5 \times 99$   
**495**

9.  $12 \times 31$   
**372**

Fill in the empty boxes, find the answers, and shade.

\*  $6 \times 89$   
 $= 6 \times (\square - 1)$   
 $= (6 \times 90) - (6 \times 1)$   
 $= \square - 6$   
 $= \square$

\*  $3 \times \square$   
 $= 3 \times (\square + 2)$   
 $= (3 \times \square) + (3 \times 2)$   
 $= \square + \square$   
 $= \square$



\*  $8 \times 98$   
 $= 8 \times (\square - \square)$   
 $= (8 \times 100) - (8 \times \square)$   
 $= \square - \square$   
 $= \square$

\*  $\square \times 38$   
 $= 5 \times (\square + 8)$   
 $= (5 \times \square) + (5 \times 8)$   
 $= \square + \square$   
 $= \square$