# Distributive Property

Hector's rock collection is in 7 cases. Each case holds 28 rocks.
How many rocks are in Hector's collection? You can use the
Distributive Property to find the product of $7 \times 28$.

**Step 1.** Split 28 into $20 + 8$.
$7 \times 28 = 7 \times (20 + 8)$

**Step 2.** Multiply 7 times each part of
the sum.
$(7 \times 20) + (7 \times 8)$

$140 + 56$

**Step 3.** Use addition to find the sum.
$140 + 56 = 196$

OR **Step 1.** Split 28 into $30 - 2$.
$7 \times 28 = 7 \times (30 - 2)$

**Step 2.** Multiply 7 times each part of
the difference.
$(7 \times 30) - (7 \times 2)$

$210 - 14$

**Step 3.** Use subtraction to find the
difference.
$210 - 14 = 196$

So, $7 \times 28 = 196$. Hector has 196 rocks in his collection.

Rewrite using the Distributive Property. Then find the product.

**1.** $3 \times 42$ _____

**2.** $39 \times 5$ _____

**3.** $6 \times 147$ _____

**4.** $19 \times 70$ _____

**5.** $54 \times 67$ _____

**6.** $90 \times 83$ _____

**7.** $364 \times 26$ _____

**8.** $45 \times 678$ _____

For questions **9** through **12**, find the value of $n$.

**9.** $4 \times 62 = (4 \times n) + (4 \times 2)$ _____

**10.** $79 \times 20 = (80 \times 20) - (n \times 20)$ _____

**11.** $53 \times 118 = (53 \times 100) + (n \times 18)$ _____

**12.** $352 \times 75 = (n \times 75) + (50 \times 75) + (2 \times 75)$ _____

**13.** Joey's class is collecting food for the school canned food
drive. There are 28 children in Joey's class. Each child
brought in 15 cans of food. Use the Distributive Property to
find out how many cans of food Joey's class collected.

# Distributive Property

Use the Distributive Property to multiply mentally.

**1.** 5 × 607 = _____

**2.** 16 × 102 = _____

**3.** 7 × 420 = _____

**4.** 265 × 5 = _____

**5.** 44 × 60 = _____

**6.** 220 × 19 = _____

**7.** 45 × 280 = _____

**8.** 341 × 32 = _____

**9.** Fill in the blanks to show how the Distributive Property can be used to find 10 × 147.

10 × (150 − 3) = (10 × 150) − (_____ × 3) =

1,500 − _____ = _____

**10.** In 1990, there were 1,133 tornadoes in the U.S. If there were the same number of tornadoes for 10 years in a row, what would be the 10-year total?

_____

**11.** There were 1,071 tornadoes in the U.S. in 2000. What is the number of tornadoes multiplied by 20?

_____

**12.** If 4 × 312 = 4 × 300 + $n$, which is the value of $n$?
   **A** 4       **B** 12       **C** 48       **D** 300

**13.** Margaret said that she used the Distributive Property to solve 4 × 444. Is her answer shown below correct? Explain.

4 × 444 = 4 × (400 + 40 + 4) =
(4 × 400) + (4 × 40) + (4 × 4) =
1,600 + 160 + 16 = 1,776

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