

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 7×28 .

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. 3×42 _____ 2. 39×5 _____ 3. 6×147 _____ 4. 19×70 _____
5. 54×67 _____ 6. 90×83 _____ 7. 364×26 _____ 8. 45×678 _____

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.