

Distributive Property

A school cafeteria ordered 8 cases of mixed fruit. Each case holds 110 cans. How many cans of mixed fruit did they order?

$$8 \times 110 = ?$$

Use the distributive property: $a \times (b + c) = (a \times b) + (a \times c)$

1. Break apart one of the numbers

$$8 \times 110 = 8 \times (100 + 10)$$

2. Find the product of each part

$$8 \times 100 = (8 \times 100) + (8 \times 10)$$

3. Add:

$$8 \times 110 = (800) + (80)$$

$$8 \times 110 = 880$$

The cafeteria ordered 880 cans of fruit.



Hint:
You can use the Distributive Property to multiply numbers in your head.

Use the Distributive Property to solve.

1. $3 \times 24 = 3 \times (20 + 4)$

$$= (3 \times \underline{\quad}) + (3 \times \underline{\quad})$$

$$= \underline{\quad} + \underline{\quad}$$

$$= \underline{\quad}$$

2. $9 \times 45 = 9 \times (\underline{\quad} + \underline{\quad})$

$$= (9 \times \underline{\quad}) + (9 \times \underline{\quad})$$

$$= \underline{\quad} + \underline{\quad}$$

$$= \underline{\quad}$$

3. $5 \times 125 = \underline{\quad} \times (\underline{\quad} + \underline{\quad})$

$$= (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$$

$$= \underline{\quad} + \underline{\quad}$$

$$= \underline{\quad}$$

4. $7 \times 63 = \underline{\quad} \times (\underline{\quad} + \underline{\quad})$

$$= (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$$

$$= \underline{\quad} + \underline{\quad}$$

$$= \underline{\quad}$$

Circle the statements that are true.

5. $5 \times 125 = (5 \times 100) + (5 \times 25)$

6. $8 \times 36 = (8 \times 36) + (8 \times 6)$

7. $3 \times 55 = (3 \times 5) + (3 \times 5)$

8. $6 \times 95 = (6 \times 90) + (6 \times 5)$

9. $7 \times 340 = (7 \times 300) + (7 \times 40)$

10. $2 \times 446 = (2 \times 400) + (2 \times 40)$

Use the Distributive Property to complete each solution.

11. $6 \times (2 + 3) = (6 \times 2) + (6 \times 3) = \underline{\quad} + 18 = \underline{\quad}$

12. $9 \times (5 + 2) = (\underline{\quad} \times 5) + (9 \times \underline{\quad}) = 45 + \underline{\quad} = \underline{\quad}$

13. $4 \times (20 + 8) = (4 \times \underline{\quad}) + (\underline{\quad} \times 8) = 80 + \underline{\quad} = \underline{\quad}$

14. $5 \times (\underline{\quad} + 30) = (\underline{\quad} \times 100) + (5 \times \underline{\quad}) = \underline{\quad} + 150 = \underline{\quad}$