

..... Properties of Multiplication

Identity Property—When a number is multiplied by one, the product is the number. $7 \times 1 = 7$

Zero Property—When a number is multiplied by zero, the product is zero. $13 \times 0 = 0$

Commutative Property—When two factors are multiplied in any order, the product is always the same. $3 \times 8 = 8 \times 3$

Associative Property—You can change the way you group numbers in a multiplication sentence, and the product is always the same. $3 \times (5 \times 6) = (3 \times 5) \times 6$

Distributive Property—You can distribute the number being multiplied by each of the numbers being added. $2 \times (4 + 3) = (2 \times 4) + (2 \times 3)$

Write the missing numbers and the names of the properties shown. The first one is done for you.

1. $92 \times \underline{0} = 0$

Zero Property

2. $8 \times (5 \times 6) = (8 \times \underline{\hspace{2cm}}) \times 6$

3. $10 \times 20 = \underline{\hspace{2cm}} \times 10$

4. $4 \times (9 + 4) = (4 \times \underline{\hspace{2cm}}) + (4 \times 4)$

5. $18 \times \underline{\hspace{2cm}} = 18$

6. $35 \times 52 = 52 \times \underline{\hspace{2cm}}$

7. $(25 \times 40) \times 20 = 25 \times (\underline{\hspace{2cm}} \times 20)$

8. $\underline{\hspace{2cm}} \times (40 + 32) = (6 \times \underline{\hspace{2cm}}) + (6 \times 32)$

9. $(\underline{\hspace{2cm}} \times 15) \times 10 = 12 \times (15 \times \underline{\hspace{2cm}})$

10. $825 \times \underline{\hspace{2cm}} = 0$

11. $356 \times 4 = \underline{\hspace{2cm}} \times 356$

12. $65 \times \underline{\hspace{2cm}} = 65$

Multiple Choice

Write the correct operation sign in each box. Circle the name of the operation you would use to solve each problem.

1. $385 \square 5 = 1,925$

addition

subtraction

multiplication

division

2. $698 \square 325 = 1,023$

addition

subtraction

multiplication

division

3. $225 \square 25 = 9$

addition

subtraction

multiplication

division

4. $398 \square 123 = 275$

addition

subtraction

multiplication

division

5. $836 \square 2 = 834$

addition

subtraction

multiplication

division

6. $556 \square 4 = 139$

addition

subtraction

multiplication

division

7. $123 \square 8 = 984$

addition

subtraction

multiplication

division

8. $436 \square 203 = 639$

addition

subtraction

multiplication

division

9. $313 \square 108 = 205$

addition

subtraction

multiplication

division

10. $725 \square 5 = 145$

addition

subtraction

multiplication

division