Properties of Multiplication and Division

Today's Standard

3.OA.B5 - Apply properties of operations as strategies to multiply and divide. Examples: If 6 x 4 = 24 is known, then 4 x 6 = 24 is also known. (Commutative property of multiplication.) 3 x 5 x 2 can be found by 3 x 5 = 15, then 15 x 2 = 30, or by 5 x 2 = 10, then 3 x 10 = 30. (Associative property of multiplication.) Knowing that 8 x 5 = 40 and 8 x 2 = 16, one can find 8 x 7 as 8 x (5 + 2) = (8 x 5) + (8 x 2) = 40 + 16 = 56. (Distributive property.)

Real-World Applications for this Standard

Calculating total cost of multiple items in a store; Distributing equal portions of food in a party; Arranging objects in rows and columns; Solving puzzles and games involving multiplication

Today I Learned

Today, we learned about the properties of multiplication and division. These properties help us solve math problems more easily.

Common Stumbling Blocks

Some kids might think that the order of multiplication matters, but it doesn't. Also, some might mix up the associative and commutative properties. We can use examples to understand the difference.

Quiz Me

- What is the commutative property?
- What is the associative property?
- Can you give an example of the distributive property?
- Does the order of multiplication matter?
- What happens when you change the grouping of numbers in multiplication?

Help Me

Multiplication and division help us solve real-world problems. For example, if you know the cost of one toy, you can find the cost of several toys by multiplying. Understanding these properties makes solving these problems easier.