Word Problems Based on Multiplication

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Word problems based on multiplication are real-life situations where we need to find the total or sum by multiplying numbers. These problems usually involve things like counting items, money, or measuring distances. We multiply to find out how many things are in total when the number of items in each group is known.

Steps to Solve Word Problems

- 1. Read the problem carefully to understand what is being asked
- 2. Identify the numbers that need to be multiplied
- 3. Choose the correct operation (multiplication)
- 4. Multiply the numbers and write the answer with the correct unit
- 5. Check the answer to make sure it makes sense

Properties Used in Multiplication

Commutative Property: $a \times b = b \times a$

Associative Property: $(a \times b) \times c = a \times (b \times c)$

Multiplicative Identity: Any number multiplied by 1 stays the same

Zero Property: Any number multiplied by 0 is 0

Example 1

Question: A farmer has 12 baskets. Each basket holds 18 apples. How many apples does the farmer have in total?

Solution:

We multiply the number of baskets by the number of apples in each basket:

 $12 \times 18 = 216$

Answer: The farmer has 216 apples in total

Example 2

Question: A toy costs 25 rupees. How much will it cost for 15 toys?

Solution:

We multiply the cost of one toy by the number of toys:

25 v 15 – 27

 $25 \times 15 = 375$

Answer: The total cost for 15 toys is 375 rupees

Summary Points

• Word problems on multiplication involve real-life situations where we multiply to find the total

- Always identify the numbers to be multiplied and choose the correct operation
- Use properties like commutative, associative, and identity to solve multiplication problems faster
- Make sure to include the correct units in your final answer