



Multiplication - associative property

Grade 4 Math Worksheet

In multiplication, the way in which the numbers are grouped in a problem does not change the product of those numbers.

Example: $(3 \times 4) \times 5 = 3 \times (4 \times 5)$

Use the associative property to fill the missing values.

1) $(_ \times 8) \times 82 = 82 \times (_ \times 47)$

2) $(2 \times _) \times 4 = (5 \times 4) \times _$

3) $_ \times (17 \times 63) = 63 \times (_ \times 55)$

4) $(4 \times 6) \times _ = 9 \times (4 \times _)$

5) $(_ \times 6) \times 5 = _ \times (53 \times 5)$

6) $(7 \times 60) \times _ = (79 \times _) \times 60$

7) $7 \times (_ \times 8) = 44 \times (_ \times 7)$

8) $4 \times (_ \times 44) = 71 \times (_ \times 4)$

9) $60 \times (6 \times _) = _ \times (4 \times 6)$

10) $5 \times (_ \times 43) = 5 \times (_ \times 8)$

Does the associative property apply to multiplication questions with a zero in them?

Answer and show an example.



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Example: $(3 \times 4) \times 5 = 3 \times (4 \times 5)$

Use the associative property to fill the missing values.

$$1) (\underline{47} \times 8) \times 82 = 82 \times (\underline{8} \times 47)$$

$$2) (2 \times \underline{5}) \times 4 = (5 \times 4) \times \underline{2}$$

$$3) \underline{55} \times (17 \times 63) = 63 \times (\underline{17} \times 55)$$

$$4) (4 \times 6) \times \underline{9} = 9 \times (4 \times \underline{6})$$

$$5) (\underline{53} \times 6) \times 5 = \underline{6} \times (53 \times 5)$$

$$6) (7 \times 60) \times \underline{79} = (79 \times \underline{7}) \times 60$$

$$7) 7 \times (\underline{44} \times 8) = 44 \times (\underline{8} \times 7)$$

$$8) 4 \times (\underline{71} \times 44) = 71 \times (\underline{44} \times 4)$$

$$9) 60 \times (6 \times \underline{4}) = \underline{60} \times (4 \times 6)$$

$$10) 5 \times (\underline{8} \times 43) = 5 \times (\underline{43} \times 8)$$

Does the associative property apply to multiplication questions with a zero in them?

Answer and show an example.

Yes, the associative property can be applied for multiplication questions with a zero in them.

$$(4 \times 5) \times 0 = 20 \times 0 = 0$$

$$4 \times (5 \times 0) = 4 \times 0 = 0$$