> In multiplication, the way in which the numbers are grouped in a problem does not change the product of those numbers.
>
> Example: (3 x 4) x 5 = 3 x (4 x 5)

Use the associative property to fill the missing values.

1) (___ × 8) × 82 = 82 × (__ × 47)

2) (2 × __) × 4 = (5 × 4) × __

3) ___ × (17 × 63) = 63 × (___ × 55)

4) (4 × 6) × __ = 9 × (4 × __)

5) (___ × 6) × 5 = __ × (53 × 5)

6) (7 × 60) × ___ = (79 × __) × 60

7) 7 × (___ × 8) = 44 × (__ × 7)

8) 4 × (___ × 44) = 71 × (___ × 4)

9) 60 × (6 × __) = ___ × (4 × 6)

10) 5 × (__ × 43) = 5 × (___ × 8)

> Does the associative property apply to multiplication questions with a zero in them?
> Answer and show an example.

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 x 4) x 5 = 3 x (4 x 5)

Use the associative property to fill the missing values.

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

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

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

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

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

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

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

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

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

10) 5 × ($\underline{8}$ × 43) = 5 × ($\underline{43}$ × 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 x 5) x 0 = 20 x 0 = 0
> 4 x (5 x 0) = 4 x 0 = 0