

**Concept Check**

Which shows an expression equal to  $8 \times (16 + 7)$ ?

**A**  $(8 \times 16) + (8 \times 7)$

**C**  $8 \times 24$

**B**  $8 \times 16 + 7$

**D**  $8 \times 7 + 16$

The \_\_\_\_\_ property says that, changing the GROUPING of numbers that are either being added or multiplied does NOT change the value of it.

$(4 \times 7) \times 6 = 4 \times (7 \times 6)$  This is an example of \_\_\_\_\_ property.

$9 + 12 = 12 + 9$  This is an example of \_\_\_\_\_ property.

The \_\_\_\_\_ property means the numbers can be swapped.

The rule that refers to grouping is \_\_\_\_\_ property.

$2 \times (45 + 9) = 2 \times 45 + 2 \times 9$  This is an example of \_\_\_\_\_ property.

$(6 \times 4) \times 3 = 6 \times (4 \times 3)$  This is an example of \_\_\_\_\_ property.

The \_\_\_\_\_ property multiplies the value outside the brackets with each of the terms in the brackets.

$3 \times (4 + 5) = 3 \times 4 + 3 \times 5$  This is an example of \_\_\_\_\_ property.

In the \_\_\_\_\_ property, the parenthesis (or brackets) can be moved.

Which of the following example shows the distributive property of multiplication over subtraction of integers?

**Options:**

**A**  $3 \times (8 - 5) = (3 \times 8) - (3 \times 5)$

**B**  $4 \times (7 + 3) = (4 \times 7) + (4 \times 3)$

**C**  $9 - (8 - 2) = (9 - 2) - 8$

**D**  $(11 - 4) - 7 = 11 - (4 - 7)$