Distributive Property

Multiplication distributes over addition. If a, b, and c are three integers, then

 $a \times (b + c) = ab + ac.$

This is called the distributive property of multiplication of integers.

Let us understand with some examples:

Example: $(-7) \times [3 + (-4)] = (-7) \times (3) + (-7) \times (-4)$

Or $(-7) \times (-1) = (-21) + 28$ Or 7 = 7

Hence, integers possess the distributive property of multiplication.

Example: $3 \times [4 - 8] = (3 \times 4) - (3 \times 8)$

Or 3 × (-4) = (12) - (24) Or -12 = -12