Multiplying/Dividing Signed Numbers

When multiplying/dividing signed numbers:
If the signs of the two numbers can cover each other completely, the answer will be positive.
If the signs of the two numbers cannot cover each other completely, the answer will be negative.

Positive/Positive = Positive

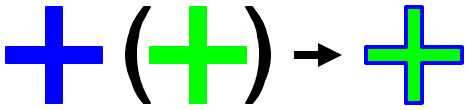
Examples:

3(4) = 12

+3(+4) = +12

+(+4) = 4

$\frac{6}{2} = \frac{+6}{+2} = +3$



When **two positive numbers** are multiplied/divided together, their signs cover each other completely. Thus, the answer is **positive**.

Positive/Negative = Negative
Negative/Positive = Negative

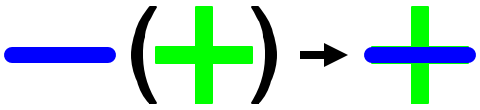
Examples:

+5(-7) = -35

-10(+2) = -20

-(6) = -(+6) = -6

$\frac{+10}{-2} = -2$



When a **negative and positive number** are multiplied/divided together, their signs do NOT cover each other completely. Thus, the answer is **negative**.

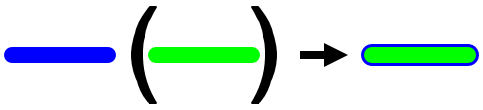
Negative/Negative = Positive

Examples:

-5(-6) = +30

$\frac{-21}{-7} = +3$

-(-2) = 2



When **two negative numbers** are multiplied/divided together, their signs cover each other completely. Thus, the answer is **positive**.

Multiplication Only

Negative/Negative = Positive

-(-6) = -|-6 = +6

Big Plus Sign

If two negatives are multiplied together as in the example, straighten the left parentheses to form a straight line. Notice the two negatives and the straightened left parentheses forms a BIG plus sign.

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