

Chapter 13

MULTIPLYING AND DIVIDING POSITIVE AND NEGATIVE NUMBERS

Multiply or divide the numbers, then count the number of negative signs.

If there are an **ODD NUMBER** of negative numbers,

the answer is **NEGATIVE**.

THERE ARE
3 NEGATIVE
NUMBERS, SO
THE ANSWER
IS NEGATIVE.

$$(+)\times(-)=(-)$$

$$(-)\div(+)=(-)$$

$$(+)\times(+)\times(-)=(-)$$

$$(-)\div(-)\div(-)=(-)$$

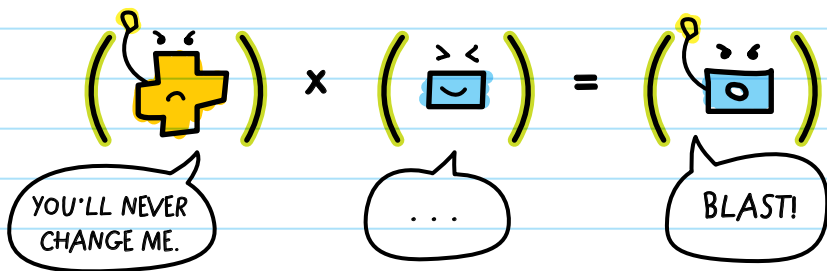
If there are an **EVEN NUMBER** of negative numbers,

the answer is **POSITIVE**.



THERE ARE
2 NEGATIVE
NUMBERS, SO
THE ANSWER
IS POSITIVE.

$$\begin{aligned}(-) \times (-) &= (+) \\(-) \div (-) &= (+) \\(-) \times (+) \times (-) &= (+)\end{aligned}$$



EXAMPLES:

$$(-4)(-7) = 28 \quad (\text{even number of negative numbers})$$

$$-11 \times 4 = -44 \quad (\text{odd number of negative numbers})$$

$$\frac{-84}{-4} = 21 \quad (\text{even number of negative numbers})$$

$$-2 \times 2 \times -2 = 8 \quad (\text{even number of negative numbers})$$