

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:

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

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

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

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



CHECK YOUR KNOWLEDGE

1. $(-2)(-8)$

2. $9 \cdot -14$

3. -20×-18

4. 100×-12

5. Joe drops a pebble into the sea. The pebble drops 2 inches every second. How many inches below sea level does it drop after 6 seconds?

6. $66 \div (-3)$

7. $-119 \div -119$

8. $\frac{27}{-3}$

9. $\frac{-9}{3} \div -1$

10. Last week, Sal's business lost a total of \$126. If he lost the same amount of money on each of the 7 days, how much money did he lose each day?

ANSWERS

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CHECK YOUR ANSWERS



1. 16
2. -126
3. 360
4. -1,200
5. 12 inches (or -12)
6. -22
7. 1
8. -9
9. 3
10. He lost \$18 each day (or -\$18).