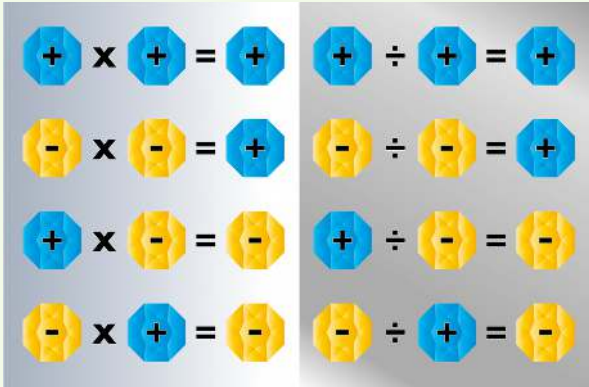


# Multiplying and Dividing Integers

## Rules



## Concept

$$2 \times 2 = 4$$

positive  $\times$  positive = positive

$$-2 \times -2 = 4$$

negative  $\times$  negative = positive

$$2 \times -2 = -4$$

positive  $\times$  negative = negative

## Examples

### SAME SIGN

$$\begin{array}{r} -8 \\ \times -4 \\ \hline 32 \end{array} \quad \begin{array}{r} 8 \\ \times 4 \\ \hline 32 \end{array}$$

product is positive

### DIFFERENT SIGNS

$$\begin{array}{r} 8 \\ \times -4 \\ \hline -32 \end{array}$$

product is negative

### SAME SIGN

$$27 \div 3 = 9$$

$$-27 \div -3 = 9$$

quotient is positive

### DIFFERENT SIGNS

$$-27 \div 3 = -9$$

$$27 \div -3 = -9$$

quotient is negative

## Assignment

|                     |                     |                    |                     |                     |
|---------------------|---------------------|--------------------|---------------------|---------------------|
| $-5$<br>$\times 4$  | $-2$<br>$\times -7$ | $-9$<br>$\times 2$ | $-4$<br>$\times 8$  | $4$<br>$\times 3$   |
| $-4$<br>$\times -4$ | $-9$<br>$\times 3$  | $6$<br>$\times 8$  | $-9$<br>$\times -5$ | $12$<br>$\times -7$ |

|                         |                      |                          |                      |
|-------------------------|----------------------|--------------------------|----------------------|
| $2 \times 3 \times -1$  | $-6$                 | $-4 \times 2 \times -1$  | <input type="text"/> |
| $-1 \times 4 \times -2$ | <input type="text"/> | $7 \times -4 \times 3$   | <input type="text"/> |
| $-2 \times -1 \times 7$ | <input type="text"/> | $10 \times 11 \times -4$ | <input type="text"/> |

$30 \div -3 = -10$

$32 \div -2 = \square$

$-30 \div 3 = \square$

$48 \div -4 = \square$

$-50 \div -5 = \square$

$-88 \div 2 = \square$

$12 \div -2 = \square$

$18 \div 9 = \square$

$-32 \div -4 = \square$

$12 \div -6 \times 12 = -24$

$-2 \times 12 = \square$

$48 \div -4 \times -2 = \square$

$-6 \div -2 \times -1 = \square$

$32 \div 6 \times -4 = \square$

$6 \div -6 \times -1 = \square$

$-12 \div -12 \times -12 = \square$

$28 \div -14 \times 4 = \square$