

Same Signs

- Add the numbers
- Answer is the Same sign as the numbers.

Ex. $-8 + -4 = -12$

$$7 + 3 = 10$$

$$4 + 8 = 12$$

$$-10 + -10 = -20$$

$$-6 + (-3) = -9$$

Same Signs

- Answer is positive

Ex. $5 \times 6 = 30$

$$-12 \times -2 = 24$$

$$7 \times 3 = 21$$

$$-4 \times -7 = 28$$

Different Signs

- Subtract the numbers
- Answer is the Same sign as the "larger" number (absolute value)

Ex.

$$-8 + 4 = -4$$

$$8 + 2 = 10$$

$$-4$$

$$7 + (-3) = 4$$

$$7 - 3 = 4$$

Different Signs

- Answer is negative

Ex. $-5 \times 6 = -30$

$$5 \times -6 = -30$$

$$4 \times -1 = -4$$

$$8 \times -9 = -72$$

$$9 \times -9 = -81$$

Keep, Change, Opposite

- Keep the first number the same
- CHANGE the subtraction to addition
- CHANGE the sign of the second number to it's opposite.
- Then follow addition rules

Ex.

$$7 - (-4) = 7 + 4 = 11$$

$$-8 - 4 = -8 + (-4) = -12$$

$$-8 - (-4) = -8 + 4 = -4$$

$$7 - 6 = 1$$

$$4 - 7 = -3$$

$$4 + (-7) = -3$$

Same Signs

- Answer is positive

Ex. $12 \div 6 = 2$

$$-12 \div -6 = 2$$

$$30 \div 5 = 6$$

$$-30 \div -5 = 6$$

$$-8 \div -4 = 2$$

Different Signs

- Answer is negative

Ex. $12 \div (-6) = -2$

$$-12 \div 6 = -2$$

$$-30 \div 5 = -6$$

$$30 \div -5 = -6$$

$$4 \div -2 = -2$$

$$\frac{8}{-4} = -2$$

$$\frac{10 \div 5}{-2} = \frac{2}{-2} = -1$$