

Multiplying and Dividing Signed Numbers

There are exactly two rules that must be followed when multiplying or dividing two signed numbers

- If the signs agree, the answer is positive
- If the signs disagree, the answer is negative

Remember, the operations of multiplication and division can only be done with 2 numbers at a time – complicated problems must be taken two numbers at a time.

Ex.

$$4 * (-5) = -20 \quad \text{opposite signs}$$

$$(-4) * (-5) = 20 \quad \text{same signs}$$

$$\frac{-20}{4} = -5 \quad \text{opposite signs}$$

$$\frac{-20}{-5} = 4 \quad \text{same signs}$$

Ex.

$$(-4)(-5)(2)(-6) \quad (-4)(-5) = 20$$

$$20(2)(-6) \quad (20)(2) = 40$$

$$40(-6)$$

$$-240$$