

## ALGEBRA RULES

## ADDITION & SUBTRACTION

Group the same type together.

**Example (Addition)** 

$$a + b + 3a + 5b = a + 3a + b + 5b$$
  
=  $4a + 6b$ 

Group the same type together.

**Example (Subtraction)** 

$$10w + 7y - 2w - 3y = 10w - 2w + 7y - 3y$$
  
=  $8w + 4y$ 

## MULTIPLICATION & DIVISION

"GEL" them together.

**Examples (Multiplication)** 

$$a \times 7 = 7a$$

 $7gh \times 2 = 14gh$ 



Express like fractions.

**Example (Division)** 

$$9\mathbf{w} \div 5 = \frac{9w}{5}$$

$$20y \div 4y = \frac{20y}{4y} = 5$$



## POWER UP & MULTIPLICATION

$$a^2 = a \times a$$

$$b^2 = b \times b$$

$$c^3 = c \times c \times c$$

$$4a \times 3a = 12a^2$$

$$3b \times 7c = 21bc$$

$$5r \times 2w \times 3h = 30hrw$$



