

# STANDARD FORM

Any line can be written in this form....

$$Ax + By = C$$

where the following conditions hold

1. There are **NO FRACTIONS** or **DECIMALS**
2. The **coefficient** of **A** must be **POSITIVE**

## X- INTERCEPTS

X-INTERCEPTS CAN BE CALLED BY THE FOLLOWING.....

1. ROOTS
  2. SOLUTIONS
  3. ZEROS
- } **THEY ALL  
MEAN THE  
SAME**

**STANDARD FORM : INTERCEPTS**

$$Ax + By = C$$

y - intercepts

x-intercepts

**set  $x = 0$   
and solve  
for  $y$**

**set  $y = 0$   
and solve  
for  $x$**

Examples: Find the y - intercept

$$x + 6y = -6$$

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$$x = 0$$

$$0 + 6y = -6$$

$$\frac{6y}{6} = \frac{-6}{6}$$

$$y = -1$$

Examples: FIND THE SOLUTION

$$3x + 8y = 2 \quad \text{--- } x\text{-int}$$

$$y = 0$$

$$3x + 8(0) = 2$$

$$\frac{3x}{3} = \frac{2}{3}$$

$$x = \frac{2}{3}$$