

Conversion of Standard/graphing
Homework

Name: HW KEY
Date: _____ Per _____

$$1. \frac{A}{-x} + \frac{B}{-y} = \frac{C}{-3}$$

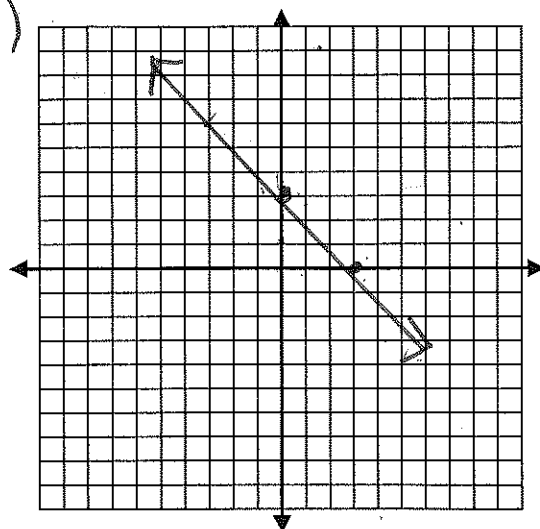
$$\boxed{y = -x + 3}$$

OR \rightarrow using $y = \frac{-A}{B}x + \frac{C}{B}$

$$y = \frac{-1}{1}x + \frac{3}{1}$$

$$y = -x + 3$$

x-int $(3, 0)$
y-int $(0, 3)$

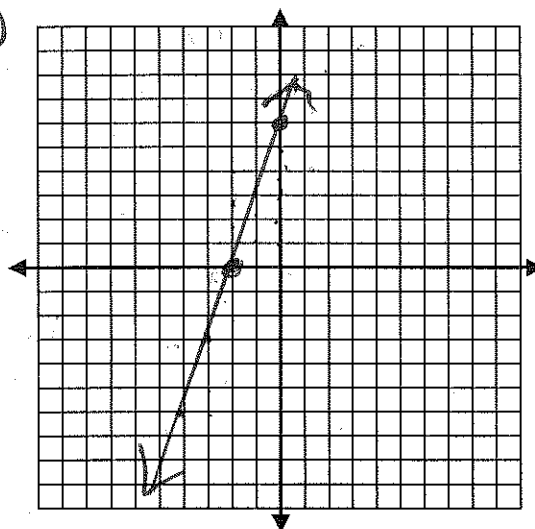


$$2. \frac{3x}{-3x} - \frac{y}{-3x} = \frac{-6}{-3x}$$

$$\frac{-y}{1} = \frac{-3x - 6}{-1}$$

$$\boxed{y = 3x + 6}$$

x-int $(-2, 0)$
y-int $(0, 6)$

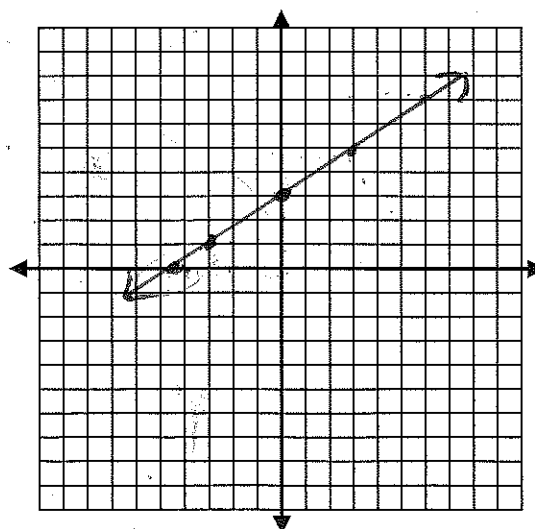


$$3. \frac{2x}{-2x} - \frac{3y}{-2x} = \frac{-9}{-2x}$$

$$\frac{-3y}{-3} = \frac{-2x - 9}{-3}$$

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

x-int $(-4.5, 0)$
y-int $(0, 3)$



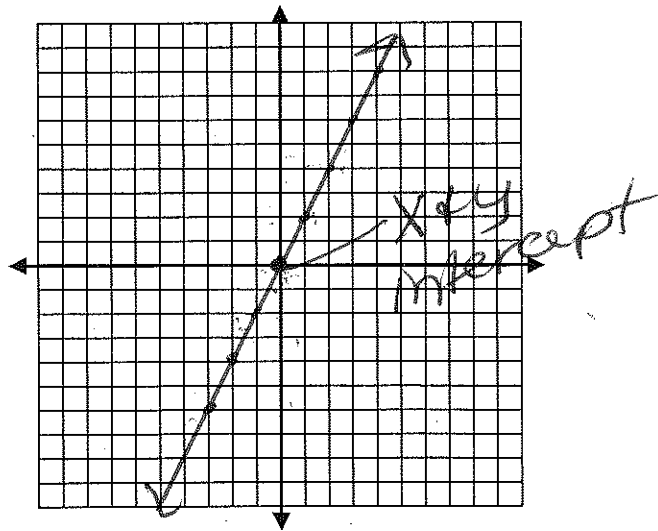
$$4. \frac{3y}{3} = \frac{6x}{3}$$

$$y = 2x$$

x	y
1	2

Standard form

$$\begin{aligned} 3y &= 6x \\ -3y &-3y \\ \hline 0 &= 6x - 3y \\ \text{x-int } &(0, 0) \\ \text{y-int } &(0, 0) \end{aligned}$$



Which ordered pairs are solutions of each equation?

$$5. 2x - 5y = 1$$

a) $(-7, -3)$

b) $(7, 3)$

c) $(2, 1)$

d) $(-2, -1)$

A
 $2(-7) - 5(-3) = 1$
 $-14 + (+15) = 1$
 $1 = 1$ ✓ yes

B
 $2(7) - 5(3) = 1$
 $14 - 15 = 1$
 $-1 \neq 1$ NO

C
 $2(2) - 5(1) = 1$
 $4 - 5 = 1$
 $-1 \neq 1$
 NO

D
 $2(-2) - 5(-1) = 1$
 $-4 + (+5) = 1$
 $1 = 1$ ✓ yes

F
N
S

$$6. \frac{A}{3}x + \frac{B}{2}y = \frac{C}{11}$$

a) $(1, 3)$

b) $(3, 1)$

c) $(5, -2)$

d) $(-1, 4)$

OR convert to slope intercept form $y = -\frac{A}{B}x + \frac{C}{B}$

$$\begin{aligned} 3x + 2y &= 11 \\ -3x &-3x \\ \hline 2y &= -3x + 11 \\ \frac{2y}{2} &= \frac{-3x + 11}{2} \end{aligned}$$

$$\begin{aligned} y &= -\frac{3}{2}x + \frac{11}{2} \\ y &= -\frac{3}{2}x + 5.5 \end{aligned}$$

then use a calculator (look at eq in table) for specific points

y =
2nd table