Algebra 1-Homework Questions

(7)

$D: (-\infty, \infty)$

$R: (-\infty, 0]$

$f(x) = -3x$

$y = -3x$

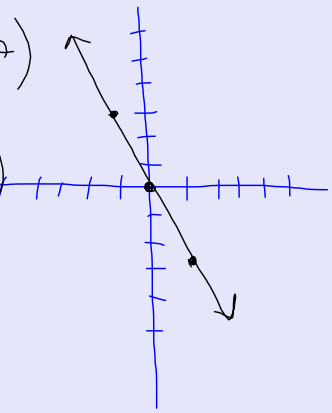
x	-3x	y
-2	-3(-2)	6

x	-3x	f(x)
-2	-3(-2)	f(-2)=6

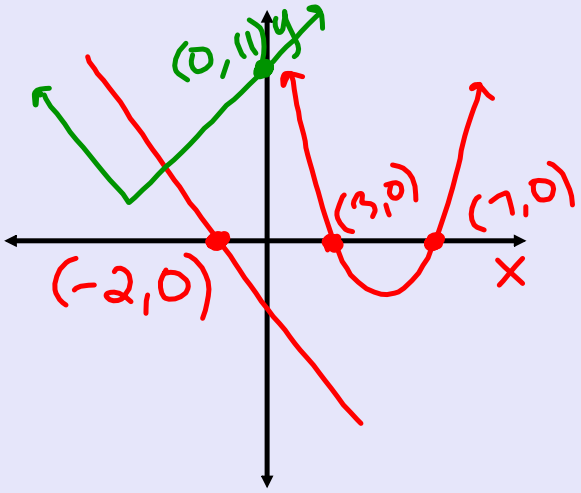
$f(x) = -3x$

$D: (-\infty, \infty)$

$R: (-\infty, \infty)$



Algebra 1-Intercepts



There are two types of Intercepts:

x-intercept-The function crosses the x axis at the point (x ,0)

y intercet-The function crosses the y axis at the point (0 ,y)

Algebra 1: y-intercepts

1. Find the intercepts by solving $y = -2x+6$

y-intercept $(0, y)$

$y = -2(0)+6$

$y = 6$ $\boxed{(0,6)}$

x-intercept $(x, 0)$

$0 = -2x+6$

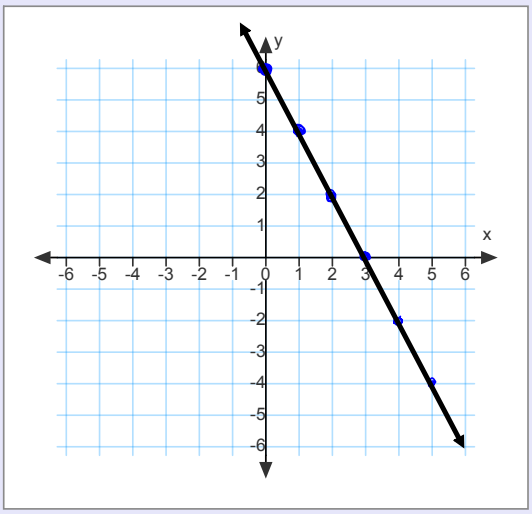
$-6 \quad -6$

$\frac{-6}{-2} = \frac{-2x}{-2}$ $\boxed{(3,0)}$

$x = 3$

Algebra 1-Intercepts

2. Find the intercepts by graphing



x	$-2x+6$	y
-2	$-2(-2)+6$	10
-1	$-2(-1)+6$	8
0	$-2(0)+6$	6
1		4
2		2

X-int: (3,0)

y-int: (0,6)

Algebra 1-Intercepts

$y = -2x + 6$

3. Find the intercepts by graphing on a calculator

x-intercept-using the zero function

2nd, trace, 2, leftside (enter) rightside (enter x2)

y-intercept-using the table

2nd, graph, when $x = 0$

(0, 6)

Group Activity

Get into groups of 3-no more and no less

You must have one calculator per group

Each of you pick a different way to find the intercepts

First Problem

$y = 3x + 9$

1. Solving

x int

$0 = 3x + 9$

$-9 \quad -9$

$-9 = 3x$

$x = -3$

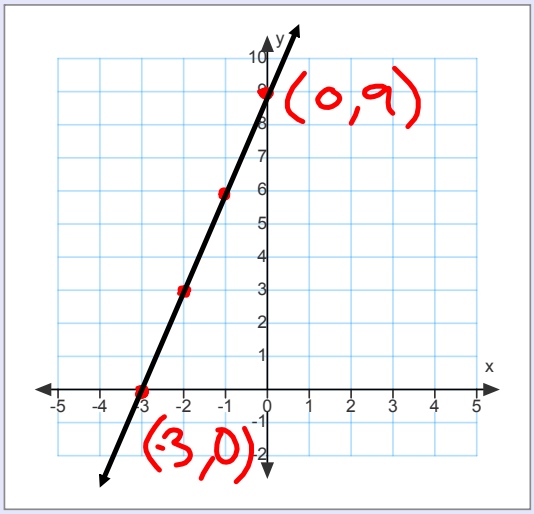
$(-3, 0)$

y int

$y = 3(0) + 9$

$y = 9 \quad (0, 9)$

2. Graphing



3. Calculator

Second Problem

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

1. Solving

x int

$0 = -\frac{3}{2}x + 6$

$-6 \quad -6$

$\cdot 2$

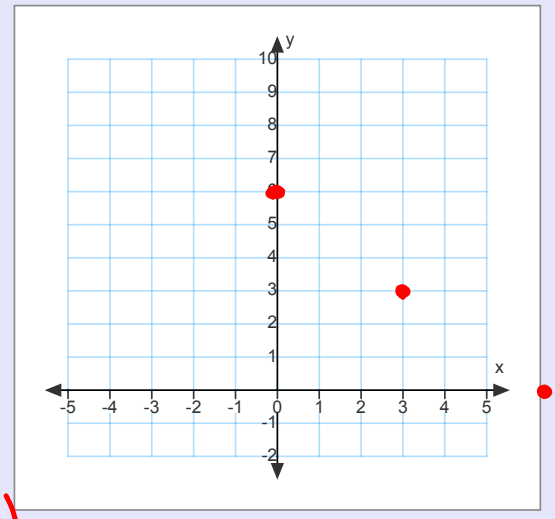
$-6 = -\frac{3}{2}x \cdot 2$

$-12 = -3x$

$x = 4 \ (4,0)$

y int: $(0,6)$

2. Graphing

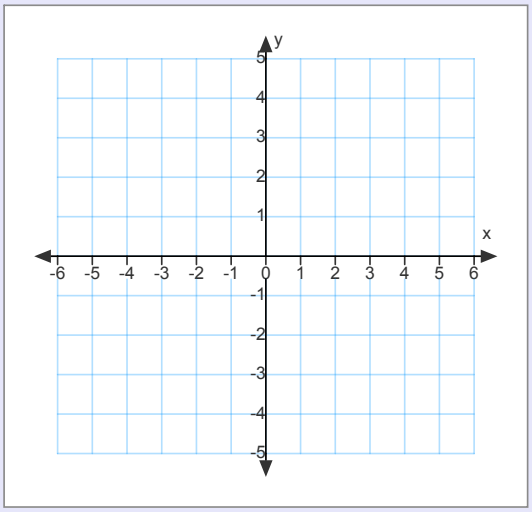


3. Calculator

Third Problem

$y = 1/2x - 3$

1. Solving
2. Graphing
3. Calculator



Homework

Pg 269 #1-6

Only find the x and y intercepts
Pg 266 #1, 3, 4 5, 7, 8, 9 (by solving)

#2, 6 (using calculator)