

1. Check Your HW let me know if you have questions

2. Then Pick Up the Warm Up

and the Ch. 4 Information Sheet.

Reminder : Ch. 4 Test tomorrow

$$\frac{1}{3}(3x-6)^3 + 4 = 13$$

$$\frac{1}{3}(3x-6)^3 = 9$$

$$(3x-6)^3 = 27$$

$$\sqrt[3]{(3x-6)^3} = \sqrt[3]{27}$$

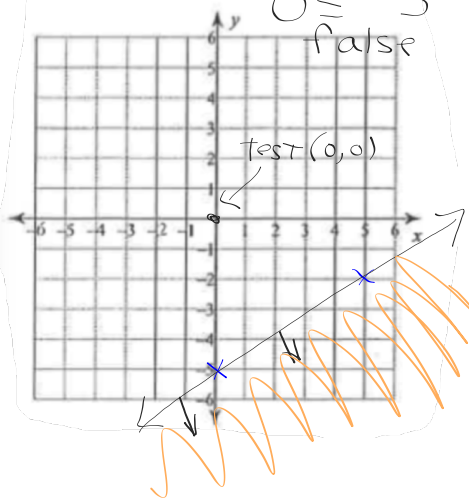
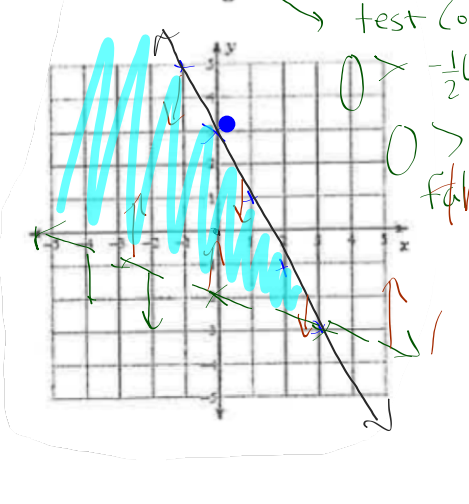
$$3x - 6 = 3$$

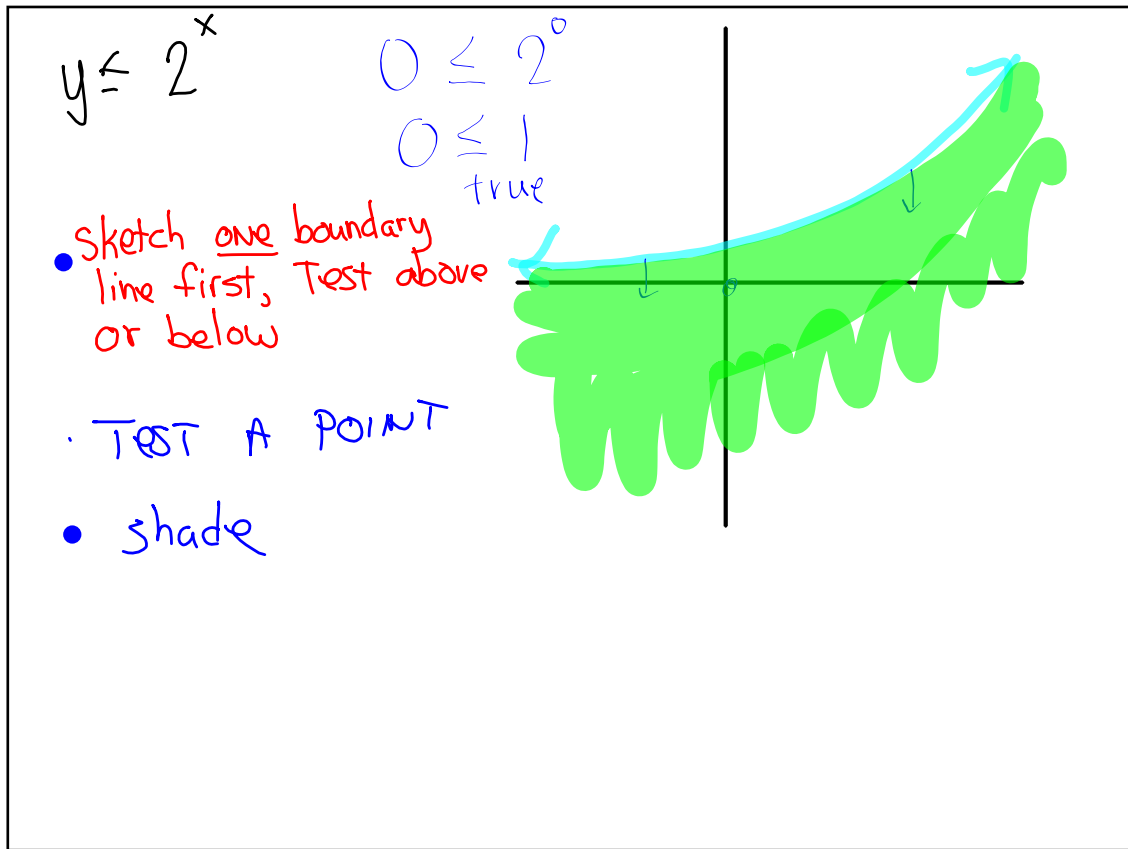
$$3x = 9$$

$$x = 3$$

~~$x = 2$
extraneous~~

$\left[\sqrt[3]{2x-1} \right]^3 = [2]^3$ <p>cube both sides (raise both sides to the 3rd power)</p> $2x-1 = 8$ $2x = 9$ $x = 4.5$ <p>or $\frac{9}{2}$</p>	<p>and two "mini quadratic equations"</p> $w^2 + 4w = 0$ $w(w+4) = 0$ <p style="text-align: center;">/ \</p> $w=0 \quad w+4=0$ <div style="border: 1px solid blue; padding: 5px; margin-top: 10px;"> <p>so</p> $w=0$ $w=-4$ </div>	$r^2 = 6r$ $r^2 - 6r = 0$ $r(r-6) = 0$ <p style="text-align: center;">/ \</p> <div style="border: 1px solid blue; padding: 5px; margin-top: 10px;"> $r=0 \quad r=6$ </div>
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<p>$y \leq \frac{3}{5}x - 5$</p> <p>Test (0,0)</p> $0 \leq \frac{3}{5}(0) - 5$ $0 \leq -5$ <p>false</p> 	<p>$y \leq -2x + 3$</p> <p>Test (0,0)</p> $0 \leq -2(0) + 3$ $0 \leq 3$ <p>true</p> <p>$y > -\frac{1}{3}x - 2$</p> <p>test (0,0)</p> $0 > -\frac{1}{2}(0) - 2$ $0 > -2$ <p>false</p> 
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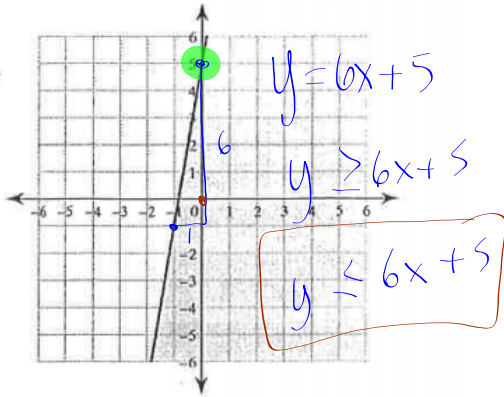
Now
Warm Up 2
(it's green)

NOW the reverse

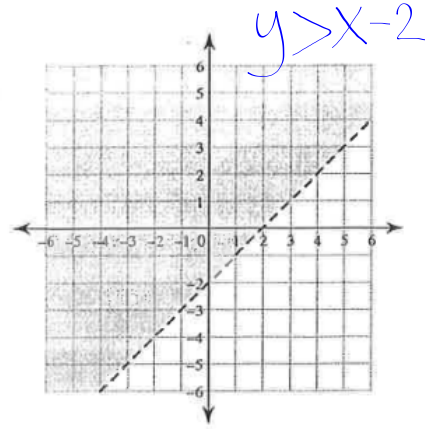
$$(x+2)^3 \geq 7x$$

Determine the 2-variable Inequalities

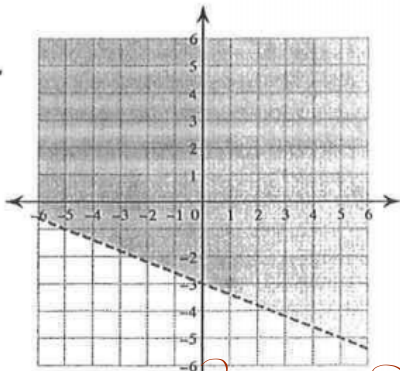
A.



B.

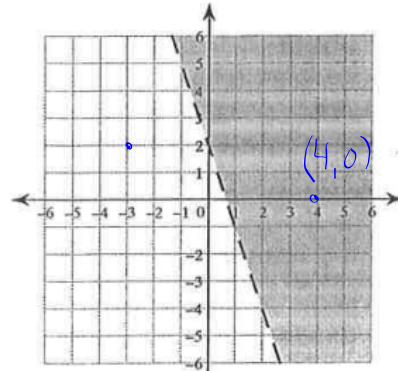


C.



$$y > -\frac{2}{5}x - 3$$

D.



$$y > -3x + 2$$

$$0 > -3(4) + 2$$

$$0 > -10$$

BB.
from Finland

on tomorrow's test

On the equation solving on the front page:

You have the ability to quickly check solutions using your calculator (store answer)



Now that you are almost finished with the first trimester of Algebra 2.... you should be showing all final solutions to equations

like this:

$$x = \frac{3}{7}$$

not this:

$$\frac{3}{7} = x$$



$\mathbb{L} \subset \mathbb{Q}$



$$\sqrt{2x+7}^2 + 4^2 = x^2$$



$$\sqrt{2x+7} + 4 = x$$

$$\sqrt{2x+7} + 4 = x$$

$$\left(\sqrt{2x+7}\right)^2 = (x-4)^2$$

$$2x+7 = \cancel{(x-4)(x-4)}$$

$$2x+7 = x^2 - 16$$

$$4 \cdot 2R = \frac{1}{4} n v^3$$

$$\frac{8R}{v^3} = n \qquad n = \frac{8R}{\frac{1}{4}v^3}$$

$$\boxed{n = \frac{8R}{v^3}} \leftarrow$$

HW
QUESTIONS remaining?

83

$$x + 2y = 4$$

$$2x - y = -7$$

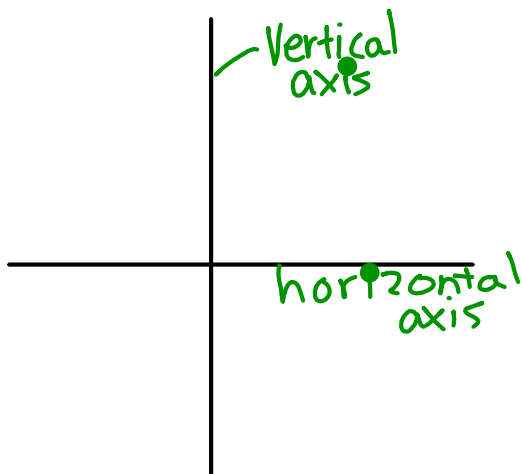
$$x + y + z = -4$$

$$\textcircled{4e} \quad 3x \left(\frac{5}{x} \right) + 3x \left(\frac{1}{3x} \right) = 3x \left(\frac{4x}{3} \right)$$

$$\cancel{x} \left(\frac{15}{\cancel{x}} \right) + \cancel{x} \left(\frac{1}{\cancel{x}} \right) = \cancel{x} (4x)$$

$$15 + 1 = 4x^2$$

88



After today's review assignment
there will be 8 assignments
for the Chapter.

80

Turn in prior to the
test tomorrow.

FGSHIRBC

for Gash Sakes Have It Ready Before Class

Today:

- A review activity to help consolidate *learning*
- Start Review Problems for tomorrow's test.

The ^{short} review activity will force you to use the concepts of the chapter.

When you see "solve using the graph given", use the graph given. Do not pick up your calculator.

When finished, start the review assignment.

Review Assignment for the Test

- 106^{abc} misc. equation solving
- 107^{ab} Solve systems
- 108 Write a "system"
- 110^{ab} Solve inequalities
- 111^a Write an equation
- 112^{ab} Solve multi-variable equations
- 113^{bcd} Rational Expression Practice from ch. 3

Do 10 or more

80

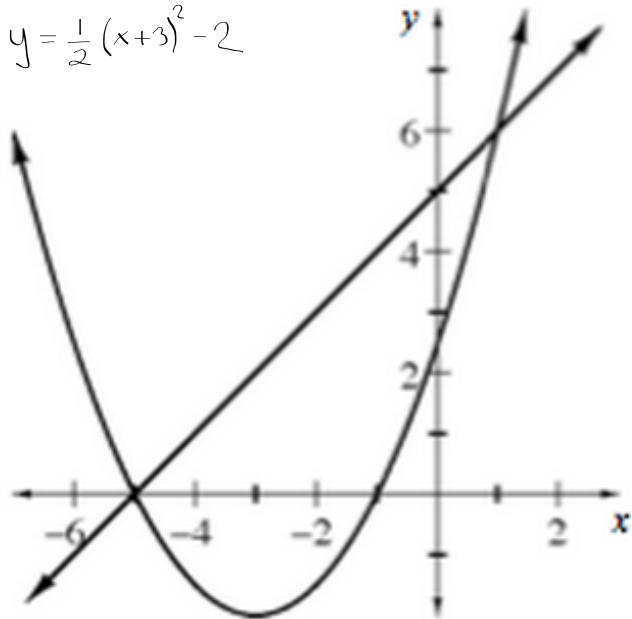
The detailed solutions to this assignment will be posted on my blog.

Duos

a) The equation of the parabola is: $y = \frac{1}{2}(x+3)^2 - 2$

b) Determine the equation
of the line: $y =$

c. Use your graph to solve
 $x + 5 = \frac{1}{2}(x+3)^2 - 2$.



d. Use your graph to solve the system:

$$y = \frac{1}{2}(x+3)^2 - 2$$

$$y = x + 5$$

e. Use your graph to solve the inequality $x + 5 < \frac{1}{2}(x + 3)^2 - 2$.

f. Use your graph to solve $\frac{1}{2}(x + 3)^2 - 2 = 0$.