

Do Now:

No packet ...

Describe the transformation...

1) $f(x) = 2x^2$ ← vertical stretch.

2) $f(x) = |.5x|$ ← h. s.

3) $f(x) = .5(x-3)^2$
V.C. ← right 3 units.

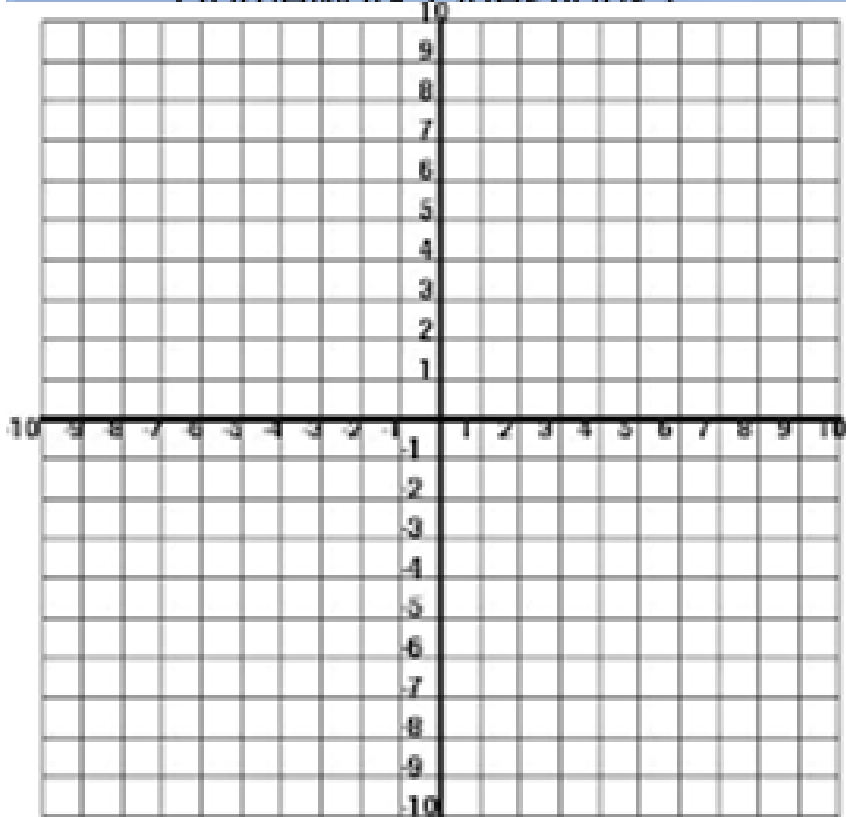
homework Due Thurs.

P.108

#25, 26, 33, 34, 47, 48, 50

List if its a stretch or
compression and by
how much.

Homework Questions?



$$(4, 2) \quad y = f(x)$$

$$y = f\left(\frac{1}{2}x\right)$$

$$y = f(2x)$$

$$\frac{1}{2} = 2$$

$$4 \cdot \frac{1}{2} = 2$$

$$4 \cdot 2 = 8$$

$$(2, 2)$$

SECTIONS 2.5C

GRAPHING TECHNIQUES;
REFLECTIONS OVER THE X-AXIS
OR Y-AXIS

Graph the following:

x^2

$|x|$

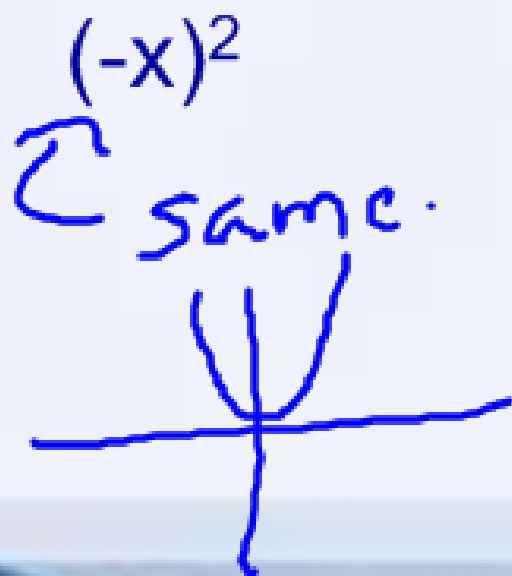
$x^2 - 4$

$-x^2$ ← reflect over x-axis.

$-|x|$

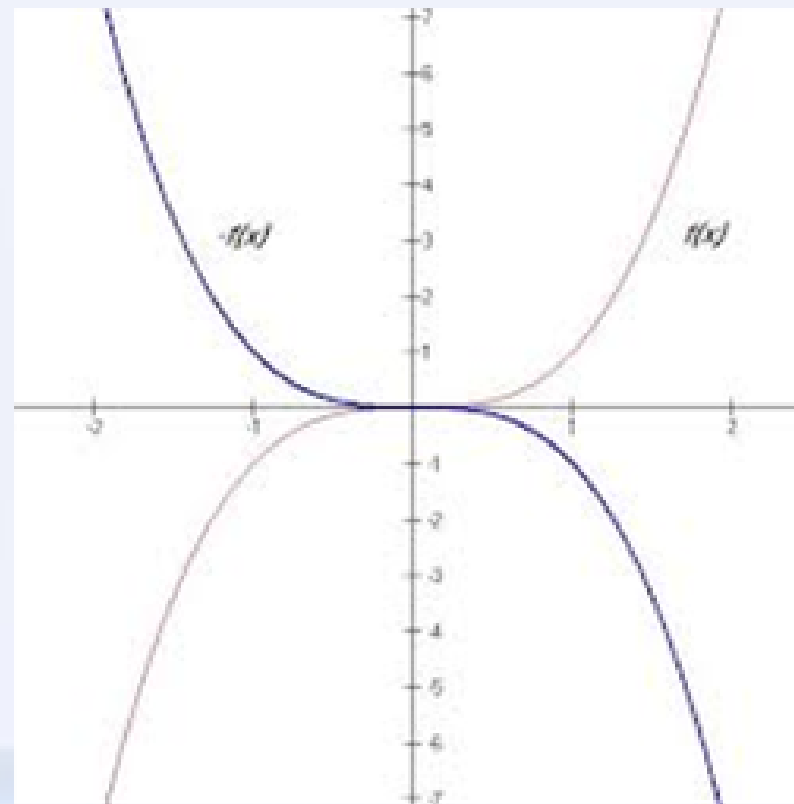
reflect x-axis

$-(x^2 - 4)$



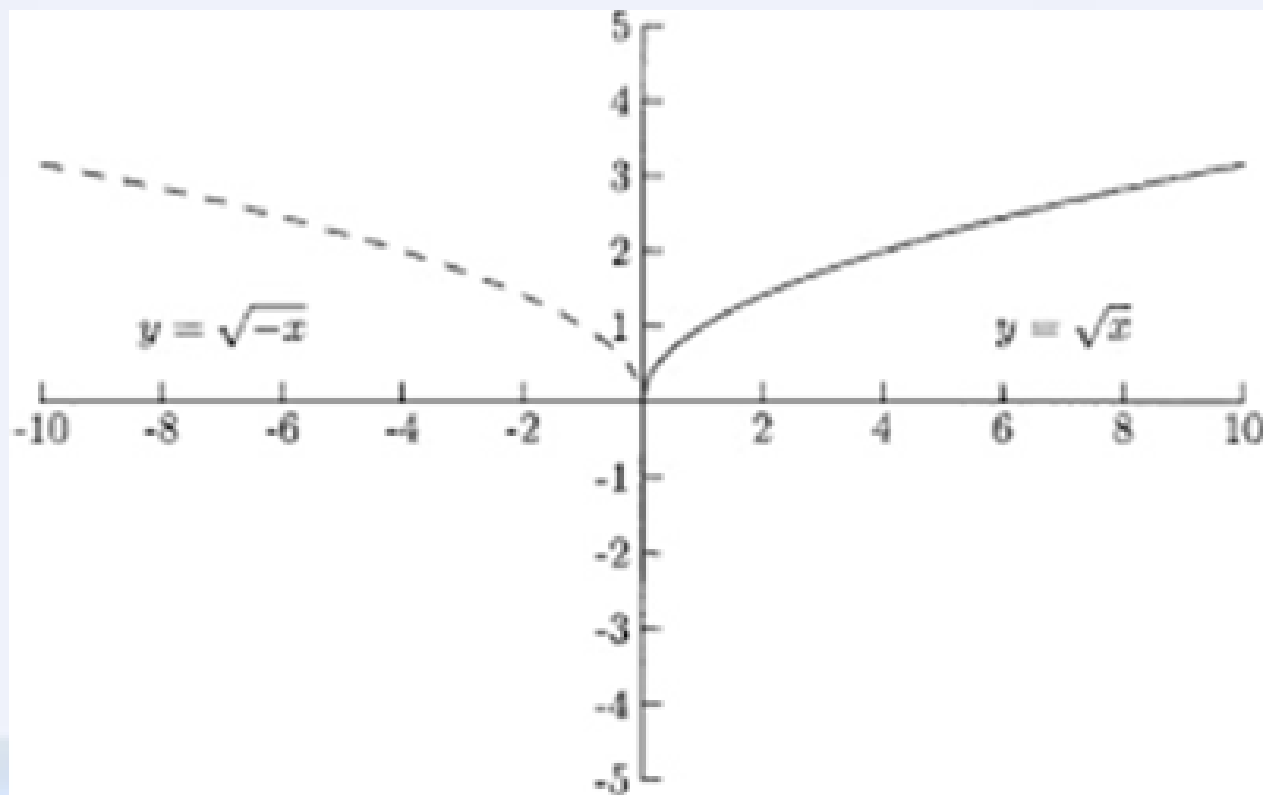
Reflection over the x-axis (vertical)

When the function is multiplied by -1 on the outside
 $y = -f(x)$



Reflection over the y-axis (horizontal)

When the function is multiplied by -1 on the inside
 $y = f(-x)$



Practice Examples...

$$\sqrt{-x}$$

$$-x^3$$

$$-|x|$$

$$(-x)^2$$

Let's Play KAHOOT!