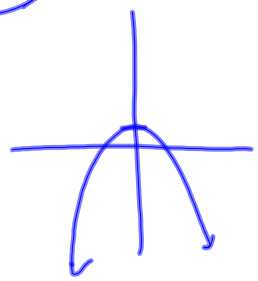
P.38 #1



D: all real #'s
$(-\infty, \infty)$

R: $y \leq 1$
$(-\infty, 1]$

Sep 9-10:41 AM

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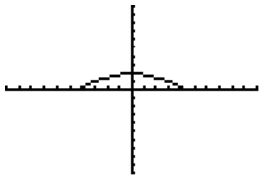
$$f(x) = \begin{cases} \sqrt{4+x}, & x < 0 \\ \sqrt{4-x}, & x \geq 0 \end{cases}$$



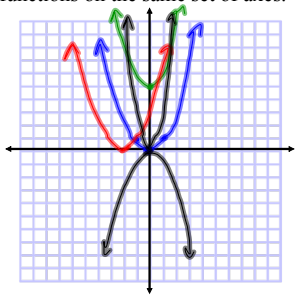
Sep 8-9:46 AM

Sep 8-9:51 AM

1-4 Transformations

Ex 1 Sketch the following functions on the same set of axes.

$f(x) = x^2$
$f(x) = x^2 + 5$
$f(x) = (x+2)^2$
$f(x) = -x^2$
$f(x) = 3x^2$



Sep 7-3:02 PM

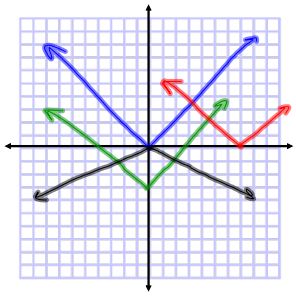
$f(x) + c$ > vertical shift
$f(x) - c$

$f(x + c)$ — horizontal shift left
$f(x - c)$ — horizontal shift right
$-f(x)$ — vertical flip
$f(-x)$ — horizontal flip
$cf(x)$ — vertical stretch
$f(cx)$ — horizontal shrink

Sep 7-3:08 PM

Ex 2 Sketch the following functions on the same set of axes

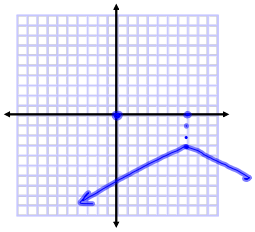
$f(x) = |x|$
$f(x) = |x| - 3$
$f(x) = |x - 7|$
$f(x) = -\frac{1}{2}|x|$



Sep 7-3:12 PM

Ex 3 Sketch the following graph.

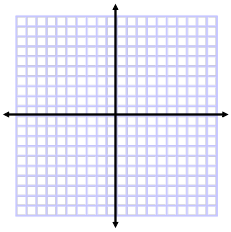
$f(x) = -\frac{1}{2}|x-7|-3$



Sep 7-3:15 PM

Ex 4 Sketch the following graph.

$f(x) = 2(x+3)^2 - 5$



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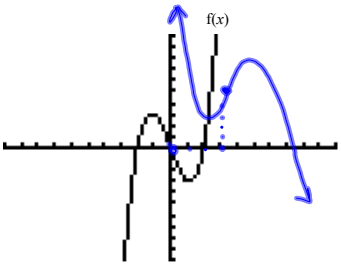
Ex 5. Given the graph of f(x), graph -f(x -3) + 5



Sep 5-8:31 AM

Homework
p.48
#1-31 odds

Sep 7-3:17 PM