Combinations (1.3)

p38 day 5

Quiz 1

Combinations (1.3)

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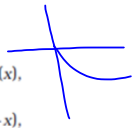
14. Consider the functic
Without graphing, d
the function after ea
a) $y = 4f(x)$
b) $y = f(-x)$
c) $y = f\left(\frac{1}{2}x\right)$
d) $y = f(2x)$

15. The graph of a function $y = f(x)$ is contained completely in the fourth quadrant. Copy and complete each statement.



a) If $y = f(x)$ is transformed to $y = -f(x)$, it will be in quadrant ■.
b) If $y = f(x)$ is transformed to $y = f(-x)$, it will be in quadrant ■.
c) If $y = f(x)$ is transformed to $y = 4f(x)$, it will be in quadrant ■.
d) If $y = f(x)$ is transformed to $y = f\left(\frac{1}{4}x\right)$, it will be in quadrant ■.

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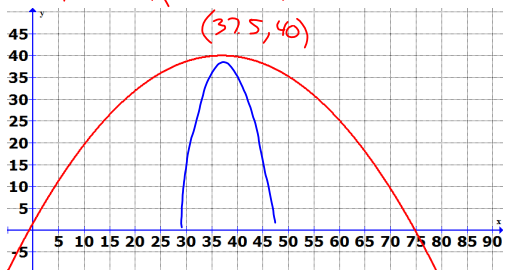
Path of an arrow

what is the equation of the parabola?

$h(d) = -0.01(d-37.5)^2 + 40$



Combinations (1.3)

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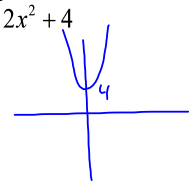
ex1: Sketch

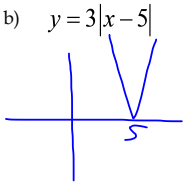
a) $y = 2x^2 + 4$

V str. 2
V trans 4 up



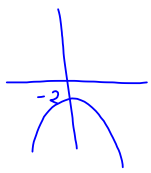
b) $y = 3|x-5|$

V str.
h trans 5 right



c) $y = -x^2 - 2$

V refl.
V trans 2 down



When combining transformations, the order is:
1. stretches
2. reflections
3. translations

Combinations (1.3)

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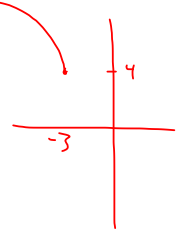
ex2: Sketch

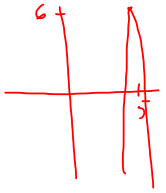
a) $y = 2\sqrt{-(x+3)} + 4$

V str.
h refl.
h trans 3 left
V trans 4 up



b) $y = -2\left(2(x-5)\right)^2 + 6$

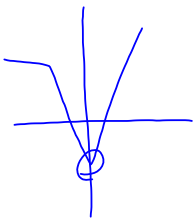
V refl.
V str.
h comp
h trans 5 r
V trans 6 up



4

4a) $y = f(-(x+2)) - 2$

b) $y = f(2(x+1)) - 4$



Combinations (1.3) p38 day 5

HW: p38#8a, 9abc,10a

Combinations (1.3) p38 day 5

ex3: Describe

a) $y = f(2(x+8))$

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