

Homework

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#1- 6

Any Questions?

Sep 16-10:37 PM

Apply the following transformations to $f(x) = x^2$, determine the equation and graph each step.

(i) translate up 3 units

(ii) right 6 units

Equation Creation

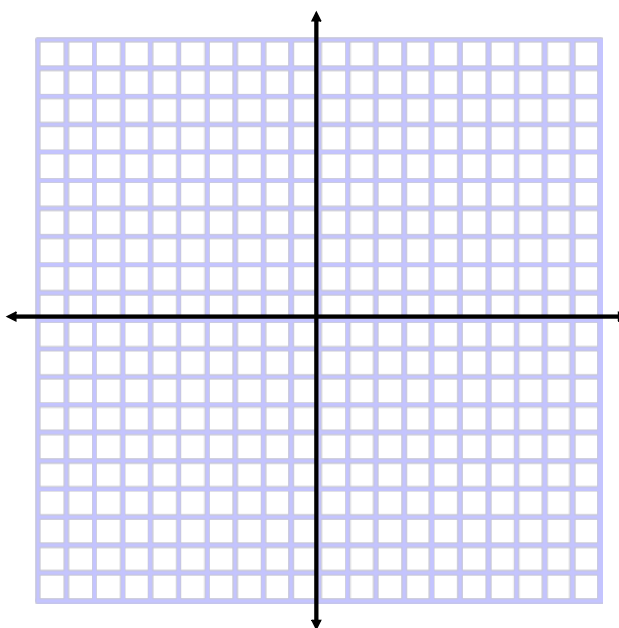
$$f(x) = (x)^2$$

$$g(x) = f(x) + 3$$

$$g(x) = x^2 + 3$$

$$z(x) = g(x - 6)$$

$$z(x) = (x - 6)^2 + 5$$



Apr 30-11:42 AM

Apply the following transformations to $f(x) = x^2$, determine the equation and graph each step.

- (i) translate left 4 units
- (ii) reflect about the x axis
- (iii) vertical stretch by 2

Equation Creation

$$f(x) = (x)^2$$

$$g(x) = f(x + 4)$$

$$g(x) = (x + 4)^2$$

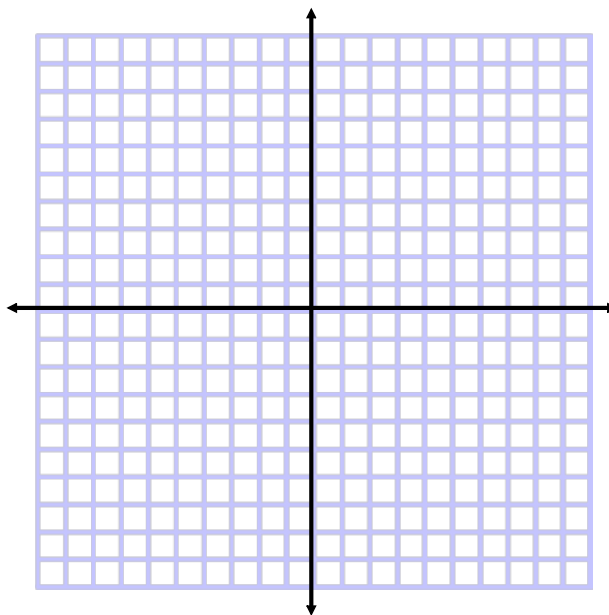
$$h(x) = -g(x)$$

$$h(x) = -(x + 4)^2$$

$$z(x) = 2h(x)$$

$$z(x) = 2(-(x + 4)^2)$$

$$z(x) = -2(x + 4)^2$$



Apr 30-11:42 AM

State the transformations applied to the following: (remember to read from left to right)

$$f(x) = -\frac{1}{2}x^2 + 8$$

- reflect about x
- vertical compression by half
- up 8

$$f(x) = 0.8(x - 4)^2 - 2$$

- vertical compression by 0.8
- right 4
- down 2

$$f(x) = 30(x + 5)^2 + 14.8$$

- vertical stretch by a factor of 30
- left 5
- up 14.8

Sep 20-2:07 PM

Consolidation Questions:

page 49 #9, 10

page 56-57 #1-5

When completed, Review package is for the weekend in preparation for your test on TUESDAY.

Sep 20-1:58 PM