

# Math 1513 - College Algebra

## Week 5 Discussion Board Questions

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Start with the function  $f(x) = x^2$ , and through translations, reflections, stretching and shrinking, arrive at the function  $g(x)$ . Use these steps to help graph  $g(x)$  as well.

1.  $g(x) = 2x^2 - 12x + 22$ .

2.  $g(x) = 2x^2 + 12x + 22$ .

3.  $g(x) = -2x^2 + 12x - 14$ .

4.  $g(x) = -2x^2 + 12x - 22$ .

5.  $g(x) = -2x^2 - 12x - 22$ .

6.  $g(x) = 2x^2 + 12x + 14$ .

7.  $g(x) = -2x^2 - 12x - 14$ .

8.  $g(x) = 3x^2 - 6x + 1$ .

9.  $g(x) = -3x^2 + 6x - 5$ .

10.  $g(x) = -3x^2 - 6x - 5$ .

11.  $g(x) = -3x^2 - 6x - 1$ .

12.  $g(x) = 3x^2 + 6x + 5$ .

13.  $g(x) = 3x^2 - 6x + 5$ .

14.  $g(x) = 3x^2 + 6x + 1$ .

15.  $g(x) = 3x^2 + 12x + 9$ .

15.  $g(x) = -3x^2 - 12x - 15$ .

16.  $g(x) = -3x^2 - 12x - 9$ .

17.  $g(x) = -3x^2 + 12x - 9$ .

18.  $g(x) = 3x^2 - 12x + 15$ .

19.  $g(x) = 3x^2 - 12x + 9$ .

20.  $g(x) = 3x^2 + 12x + 15$ .