## **1.6 Graphical Transformations**

Non-Calculator

g(x) = 2 x - 5  + 3	
Describe the transformations for the function given above.	<ul> <li>In the space above, write a quadratic function satisfying the transformations given below.</li> <li>Transformations: <ul> <li>Horizontal shift 3 units to the left</li> <li>Vertical shift 2 units down</li> <li>Vertical shrink by a factor of <sup>1</sup>/<sub>3</sub></li> </ul> </li> </ul>
Sketch the given function based upon the transformation.	Sketch the given function based upon the transformation.

## Calculator

Which of the equations below would represent  $f(x) = 2(x + 1)^2 + 3$  after it was reflected over the *x*-axis?

- a)  $f(x) = -2(x + 1)^2 + 3$ c)  $f(x) = 2(-x + 1)^2 + 3$ b)  $f(x) = -2(x + 1)^2 - 3$ d)  $f(x) = 2(-x + 1)^2 - 3$