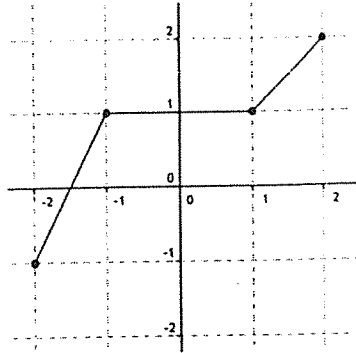


Name: _____

Date: _____

1. Use the graph of the elementary, or arbitrary, function $y = h(x)$ below.



- (i) State the transformation(s).
- (ii) Sketch an accurate graph of the transformed function. Please sketch each graph on its own coordinate plane.

<p>a. $y = h(x) + 2$</p>	<p>b. $y = h(x + 2)$</p>	<p>c. $y = h(x + 2) + 2$</p>
<p>d. $y = h(x) - 3$</p>	<p>e. $y = h(x - 3)$</p>	<p>f. $y = h(x + 2) - 3$</p>

2. If the point $(-7, 3)$ lies on the graph of an elementary function $y = g(x)$, find a point that lies on the graph on the function below.

a. $y = g(x - 3) - 8$

b. $y = g(x + 4) - 9$

c. $y = g(x - \sqrt{3}) + 11.5$

3. Using the elementary function $y = x^2 - 2x - 3$, create a new equation that will transform the given equation in the manner indicated.

a. ~~Right 7-units~~

b. Down 3-units

c. Left 4-units, Up 8 units

Now complete pg. 165 # 83-87 in the space below.