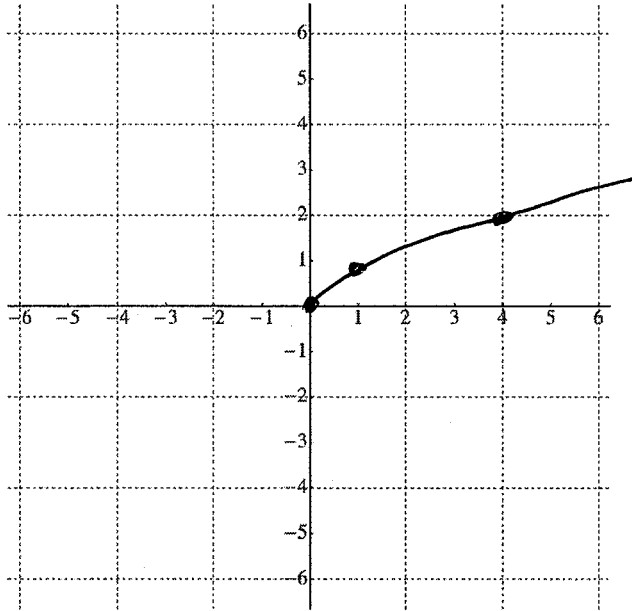


No calculators are allowed on this quiz. Please read each question carefully, follow directions and clearly mark your solutions. Show your work for full credit.

1. Graph $y = 2\sqrt{-x+1}$ using transformations. Start with the graph of a basic function – plot accurately as least three points and use them to perform transformations. Do one transformation at a time. Name the transformation and write the equation of the resulting function.

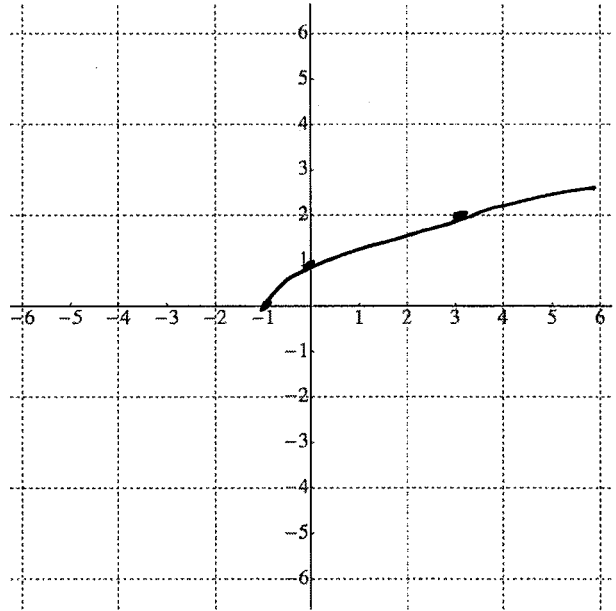
(i) Basic function:

$$y = \sqrt{x}$$



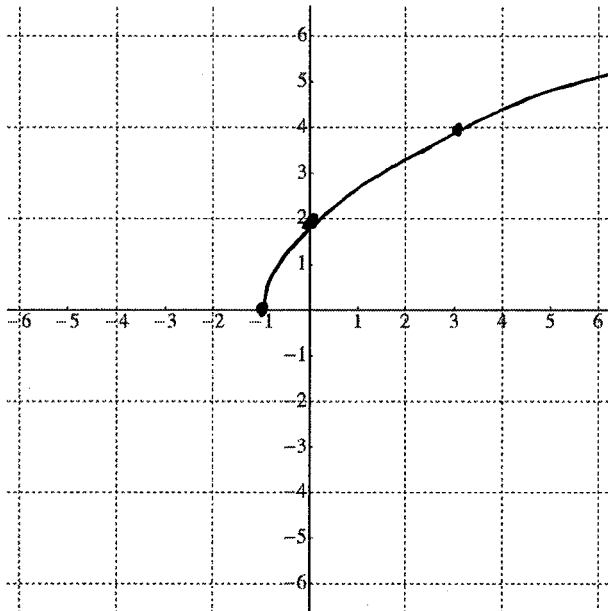
(ii) transformation: *hor. shift to*

$$y = \sqrt{x+1} \quad \text{left by 1}$$



(iii) transformation: *vert. stretch by 2*

$$y = 2\sqrt{x+1}$$



(iv) transformation: *reflection about the y-axis*

$$y = 2\sqrt{-x+1}$$

