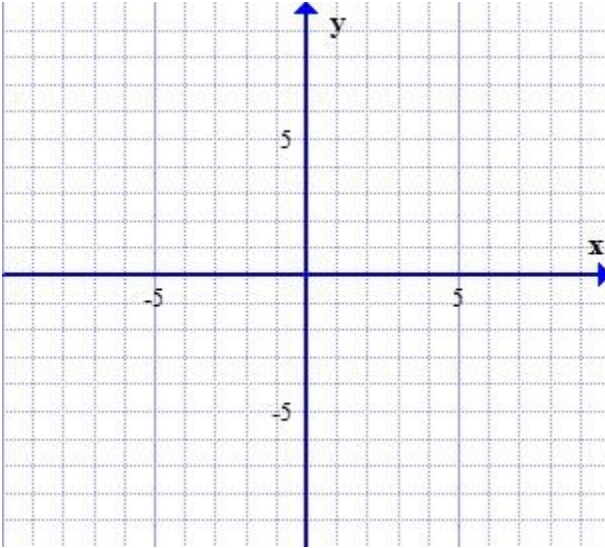


Transformations Part 2: Reflections

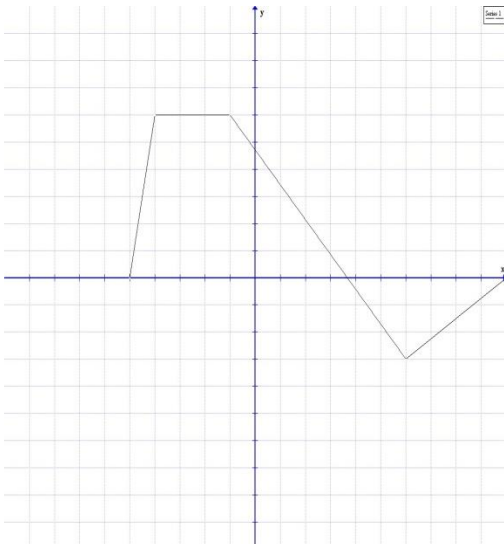
Graph: $y = \sqrt{x}$, $y = -\sqrt{x}$ and $y = \sqrt{-x}$ on the same grid



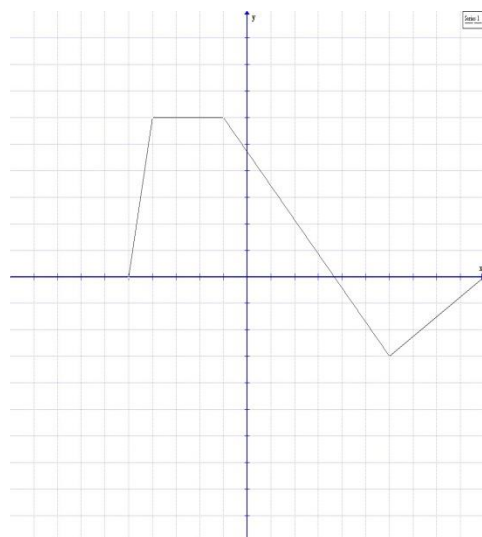
Rule:

1) The graph $y = f(x)$ is shown. Sketch

a) $y = -f(x)$



b) $y = f(-x)$



- 2) Write the image of the function $y = x^3 + x$ after a reflection in the x -axis.
- 3) Write the image of the function $y = x^3 + x$ after a reflection in the y -axis.
- 4) Write the image of the function $y = \sqrt{x+2}$ after a reflection in the x -axis
- 5) Write the image of the function $y = \sqrt{x-2}$ after a reflection in the x -axis, followed by a translation 2 units to the right.
- 6) Write the image of the function $y = 3x^3 - x^2 - x$ after a reflection in the x -axis, followed by a reflection in the y -axis.