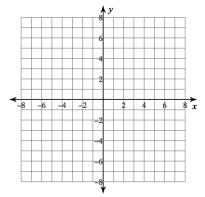
3-4 Graphing Radical Functions

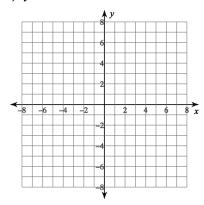
Period

(3-4a) State the transformations and sketch the graph. Also, identify the domain and range of each.

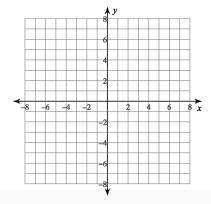
1)
$$y = -\sqrt{x-1} - 1$$



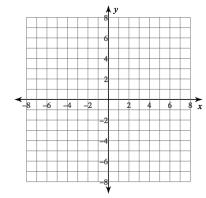
3)
$$y = \sqrt{x-2} - 2$$



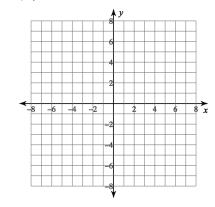
5)
$$y = \sqrt[3]{x} + 5$$



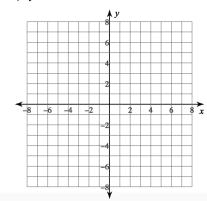
2)
$$y = \sqrt{x+3}$$



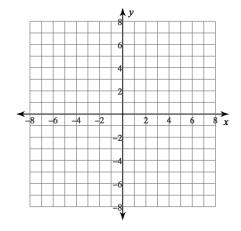
$$4) \ \ y = 2\sqrt{x}$$



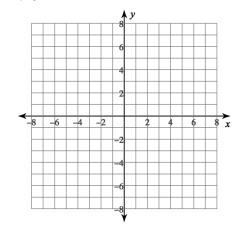
6)
$$y = \sqrt[3]{x-4} + 1$$



7)
$$y = -2\sqrt[3]{x}$$

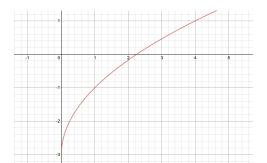


8)
$$y = 2\sqrt[3]{x-4} + 1$$

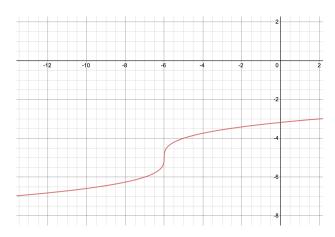


Write the equation for each function.

9)



10)



(3-3a) Solve each equation. Remember to check for extraneous solutions.

$$11) \sqrt{110-x}=x$$

12)
$$\sqrt{3n-4} = \sqrt{n+2}$$