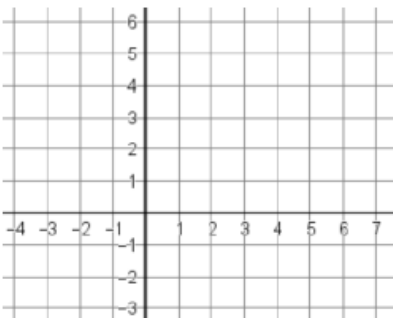
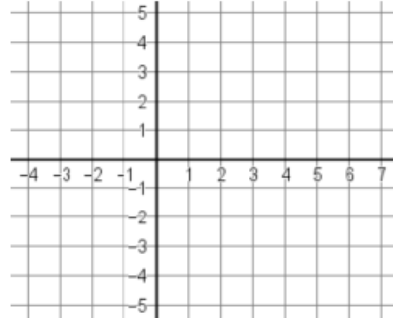
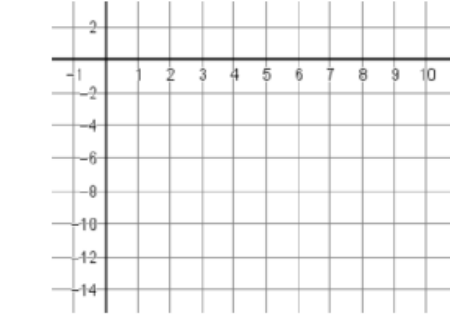
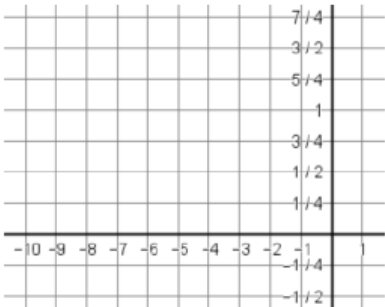
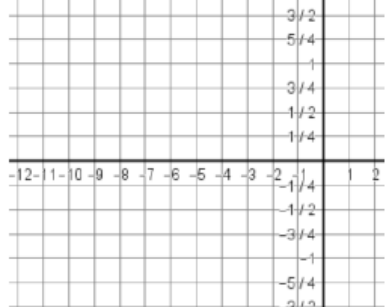
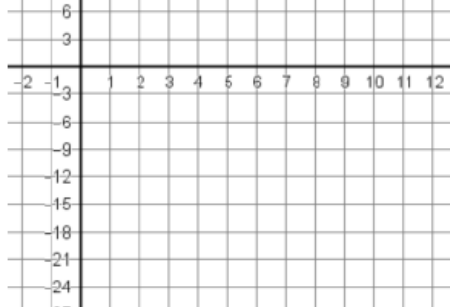


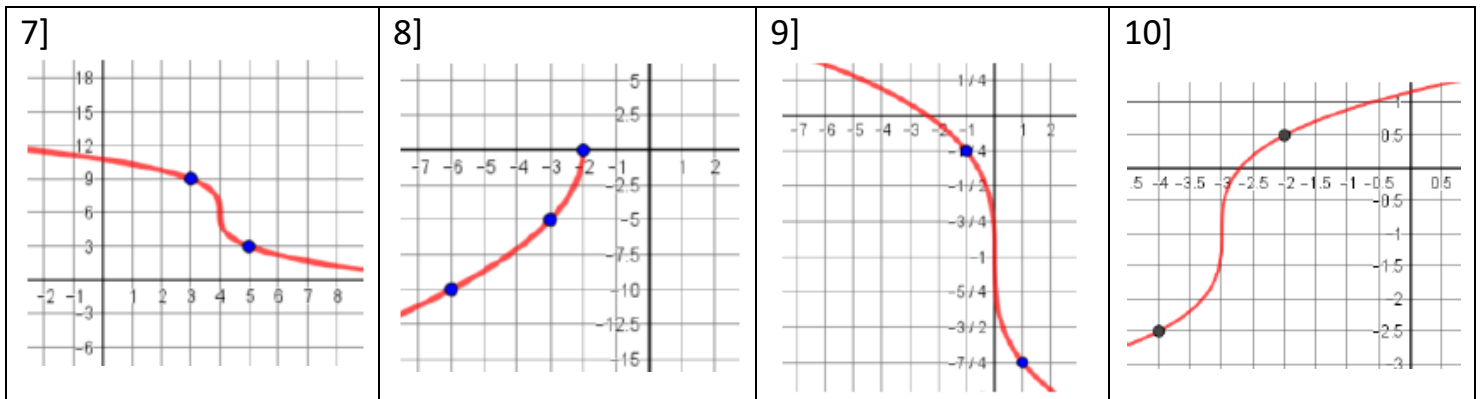
## GRAPHING RADICAL FUNCTIONS: Chapter 10 Review

Graph each radical function and describe its characteristics. Round irrational values to one decimal place.

<p>1] <math>y = 2\sqrt[3]{x-4} + 2</math></p> <p>Center point:          y-intercept:</p> <p>Guide points using <math>a</math>: <del>_____</del></p> <p>Extra guide points: (-4, _____) and (7, _____)</p>  <p>Domain:                  Range:</p>	<p>2] <math>y = 3\sqrt{x+2} - 4</math></p> <p>Endpoint:                  y-intercept:</p> <p>Guide point using <math>a</math>:</p> <p>Extra guide points: (2, _____) and (7, _____)</p>  <p>Domain:                  Range:</p>	<p>3] <math>y = -4\sqrt[3]{-(x-1)} - 8</math></p> <p>Center point:                  y-intercept:</p> <p>Guide points using <math>a</math>:</p> <p>Extra guide points: (4, _____) and (9, _____)</p>  <p>Domain:                  Range:</p>
<p>4] <math>y = -\frac{1}{2}\sqrt{-x} + \frac{3}{2}</math></p> <p>Endpoint:                  y-intercept:</p> <p>Guide point using <math>a</math>:</p> <p>Extra guide points: (-9, _____) and (-4, _____)</p>  <p>Domain:                  Range:</p>	<p>5] <math>y = \frac{3}{4}\sqrt[3]{-x-4}</math></p> <p>Center point:                  y-intercept:</p> <p>Guide points using <math>a</math>:</p> <p>Extra guide points: (-12, _____) and (2, _____)</p>  <p>Domain:                  Range:</p>	<p>6] <math>y = -9\sqrt{x-2} + 3</math></p> <p>Endpoint:                  y-intercept:</p> <p>Guide point using <math>a</math>:</p> <p>Extra guide points: (6, _____) and (11, _____)</p>  <p>Domain:                  Range:</p>

## GRAPHING RADICAL FUNCTIONS: Chapter 10 Review

Write the equation of the radical function.



Identify the parameters and describe what they have done to each graph as compared to the parent graph.

11]  $y = \frac{3}{2}\sqrt{-x + 23} + 3$

12]  $y = -\frac{2}{3}\sqrt[3]{x + 23} - 3$

Write the equation that meets the given description.

- 13] A radical function that has a center point at  $(4, 1)$  and passes through the point  $(12, \frac{1}{3})$ .
- 14] A radical function that has a domain of  $x \leq 8$  and a range of  $y \geq 15$  that passes through the point  $(-8, 63)$ .
- 15] A cube root function translated 6 units to the left and down half of a unit that passes through the point  $(-7, -8.5)$ .