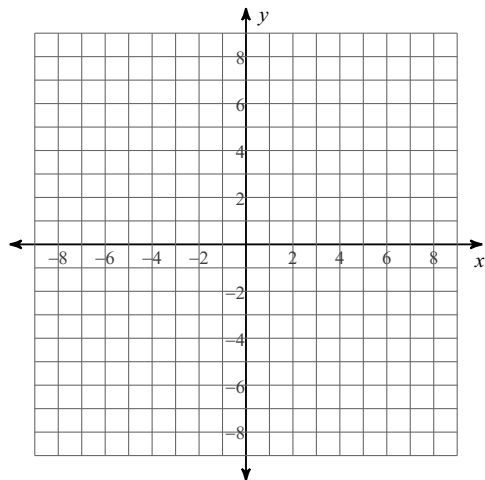


Graphing Radical Functions - Guided Notes

Graphing Square Roots

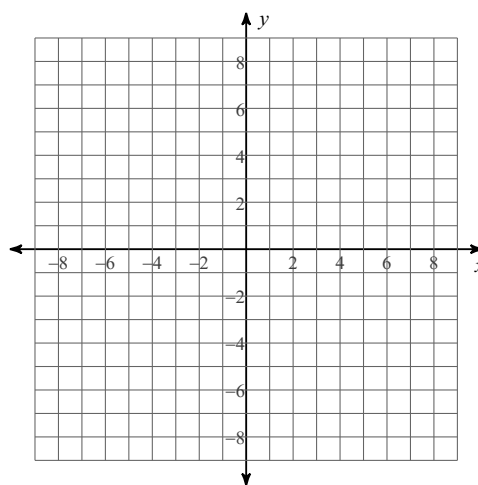
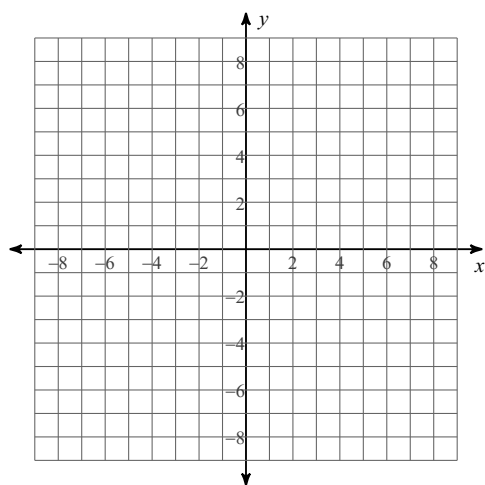
1) $y = x^2$

2) Find the inverse of $y = x^2$.



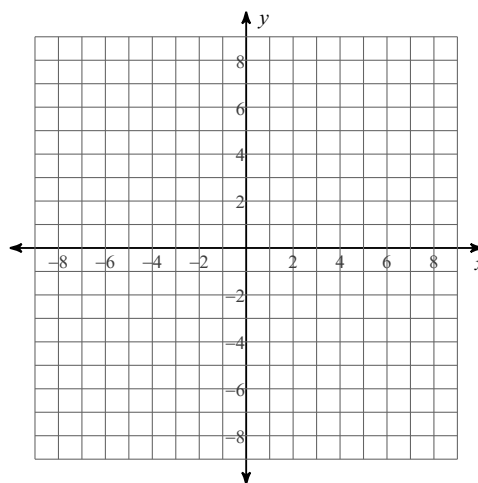
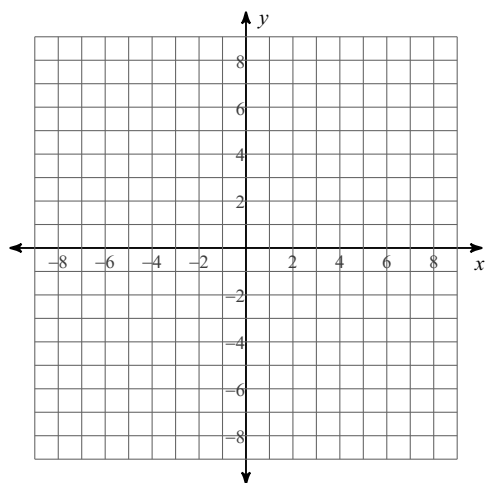
3) Now, graph $y = \sqrt{x}$

4) Try $y = \sqrt{x + 2} - 5$



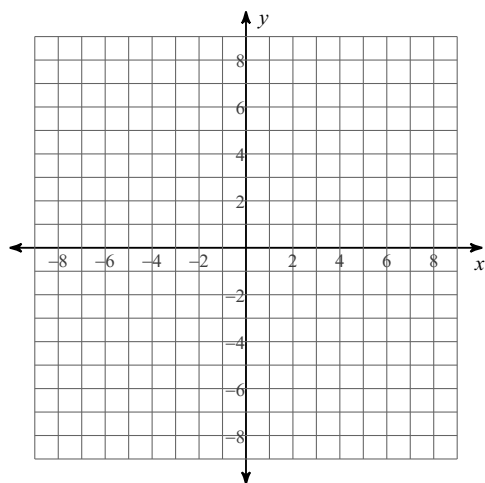
5) What about $y = 3\sqrt{x}$

6) So, now you can do $y = -2\sqrt{x - 3} + 1$



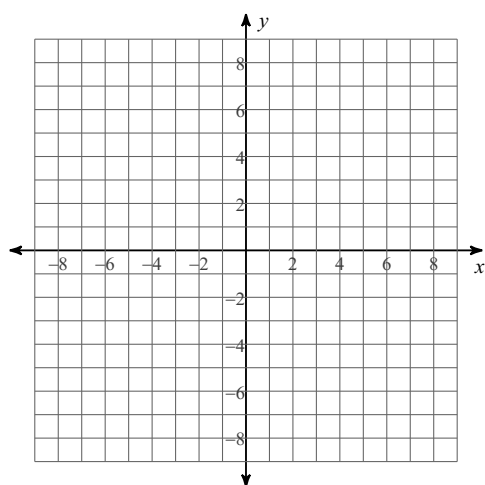
Graphing Cube-Roots

7) Graph the function $y = x^3$

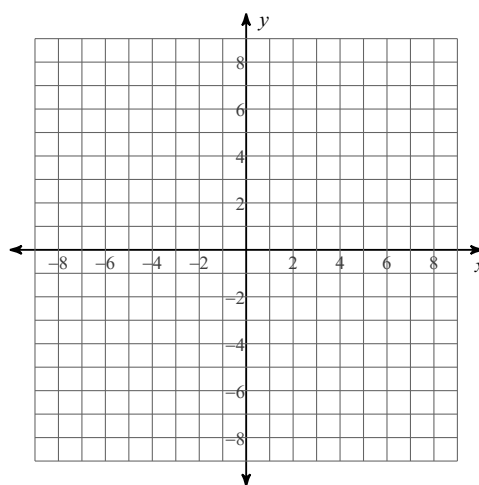


8) Find the inverse of $y = x^3$

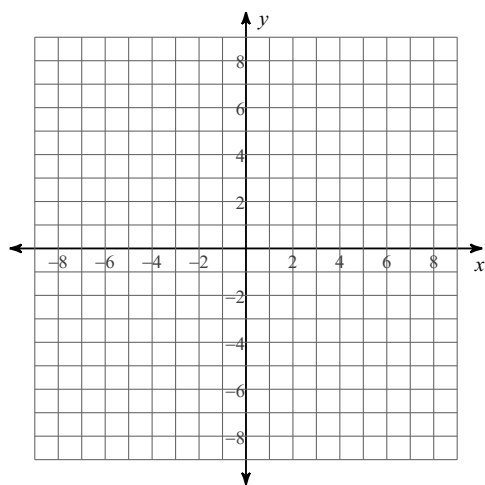
9) Based on the graph of #7, what is the graph of $y = \sqrt[3]{x}$?



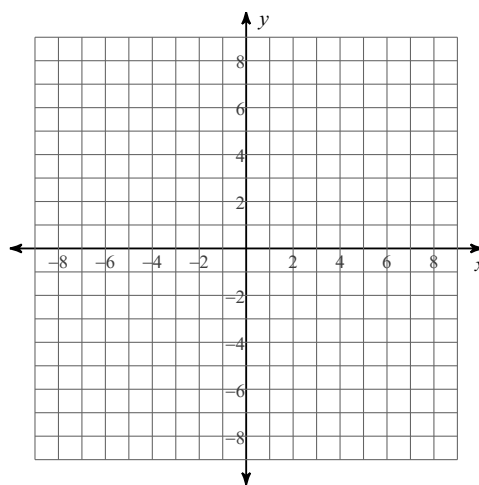
10) Using #9 as a guide, graph $y = \sqrt[3]{x+2} - 3$?



11) Now try the graph of $y = -2\sqrt[3]{x}$?

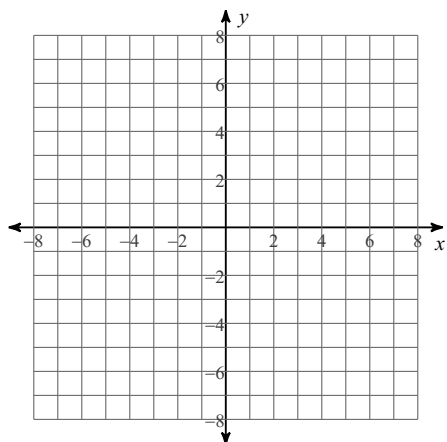


12) Now try the graph of $y = -2\sqrt[3]{x+4} - 3$?

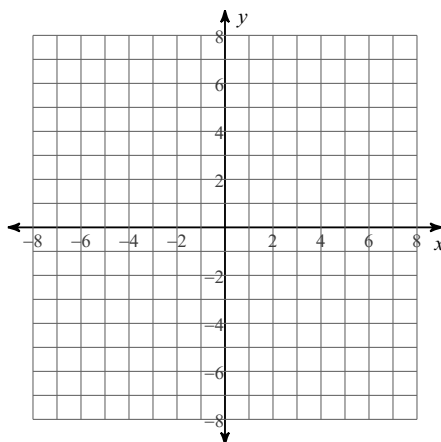


Sketch the graph of each function.

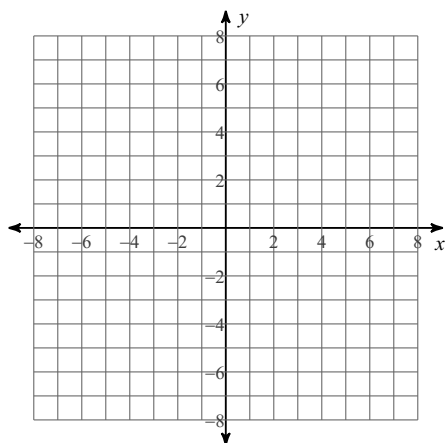
13) $y = \sqrt{x+4} + 3$



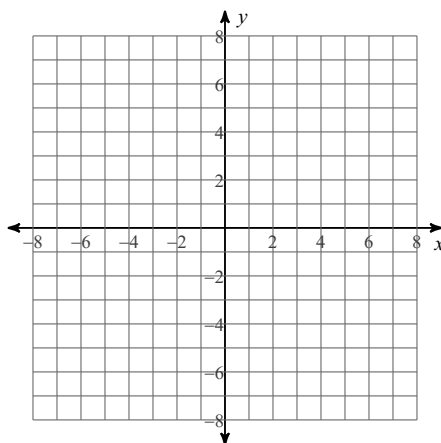
14) $y = \sqrt[3]{x-1}$



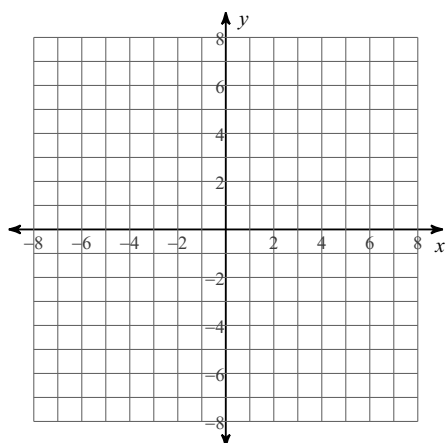
15) $y = \sqrt[3]{x+5} + 3$



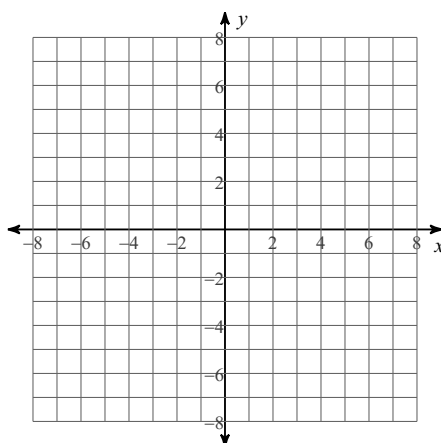
16) $y = \sqrt{x-2} + 5$



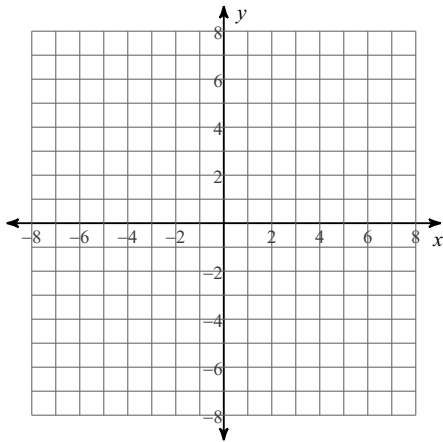
17) $y = 1 + \sqrt{x-3}$



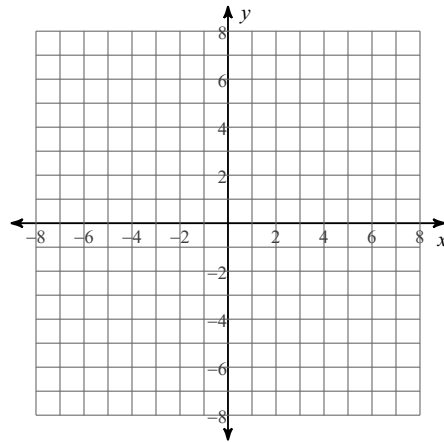
18) $y = \sqrt{x-1} - 1$



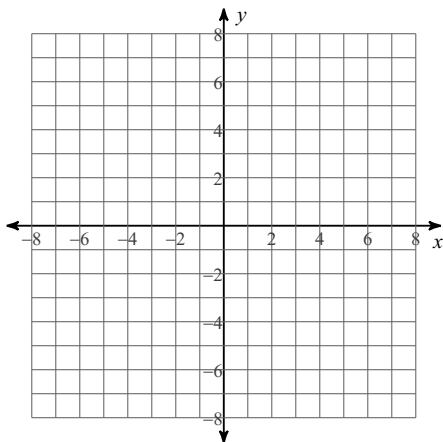
19) $y = 2\sqrt{x+3}$



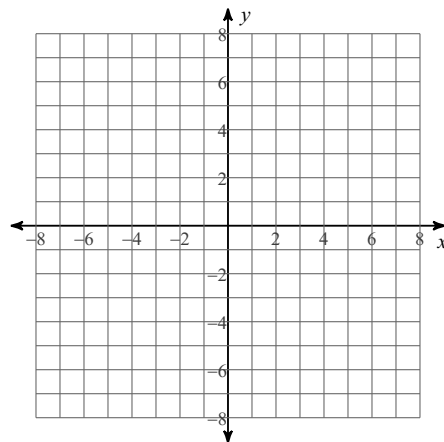
20) $y = 2\sqrt[3]{x}$



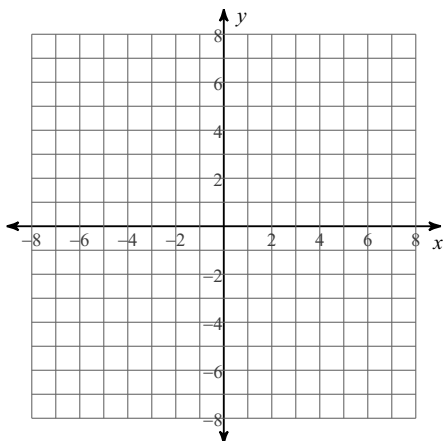
21) $y = -3\sqrt[3]{x}$



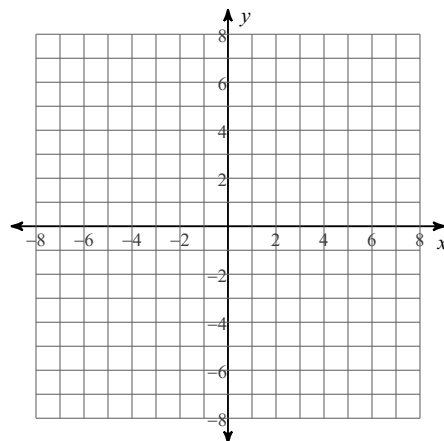
22) $y = \sqrt[3]{x+3} - 5$



23) $y = -4\sqrt{x} + 4$



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



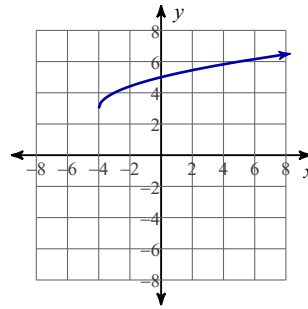
Answers to Graphing Radical Functions - Guided Notes (ID: 1)

1)
9)

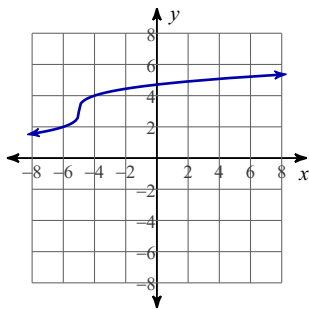
3)
11)

5)
13)

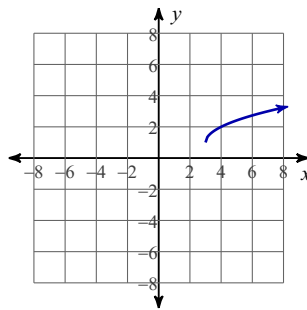
7)



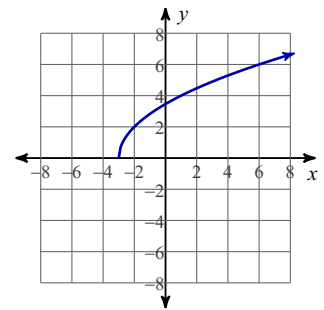
15)



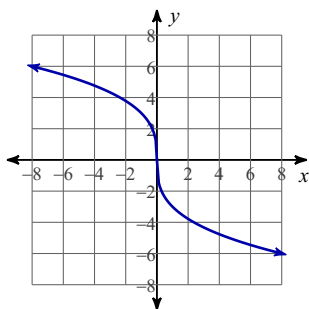
17)



19)



21)



23)

