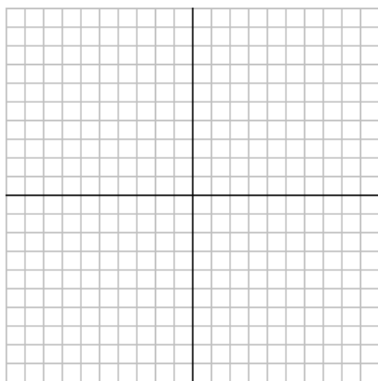


Graph the radical function. Be sure to show the THREE key distinct points for each graph.
Identify the Domain and Range.

1. $f(x) = \sqrt{x+4} - 7$

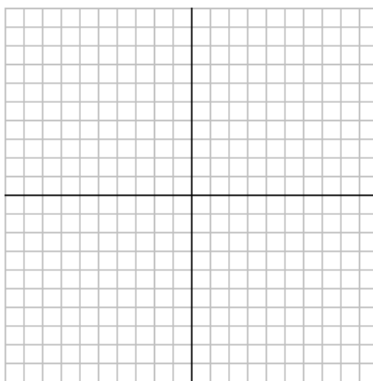
2. $f(x) = 3\sqrt{x} + 1$

3. $f(x) = -2\sqrt{x-1} - 2$



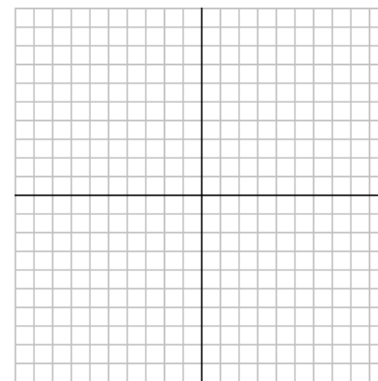
D:

R:



D:

R:



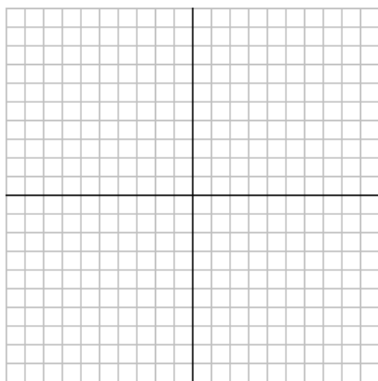
D:

R:

4. $f(x) = -4\sqrt{x+5} + 4$

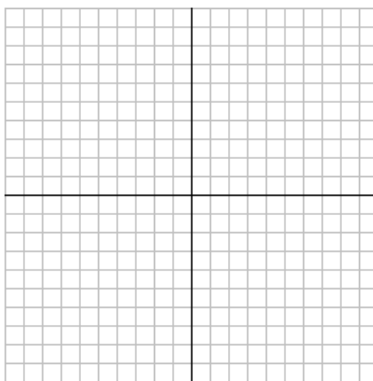
5. $f(x) = 2\sqrt{3-x} - 1$

6. $f(x) = -2\sqrt{4+x} + 3$



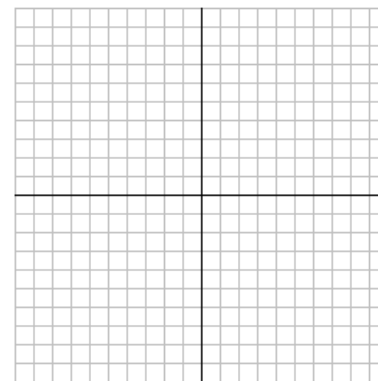
D:

R:



D:

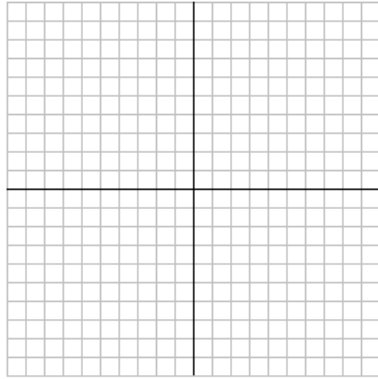
R:



D:

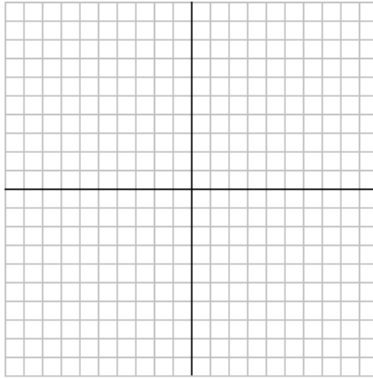
R:

7. $f(x) = \sqrt[3]{x-3} + 4$



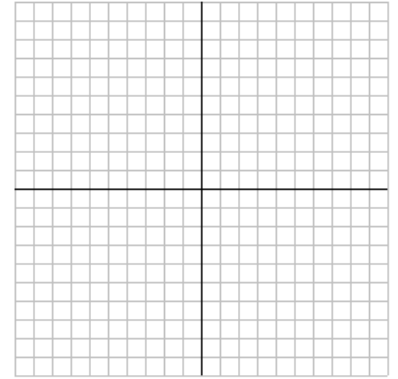
D: R:

8. $f(x) = 4\sqrt[3]{x+2} + 3$



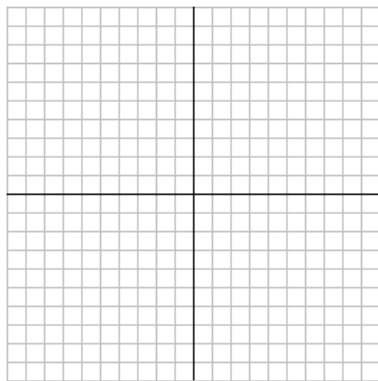
D: R:

9. $f(x) = -3\sqrt[3]{x-6}$



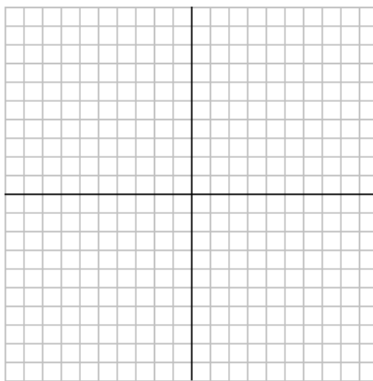
D: R:

10. $f(x) = -\sqrt[3]{x+1} - 5$



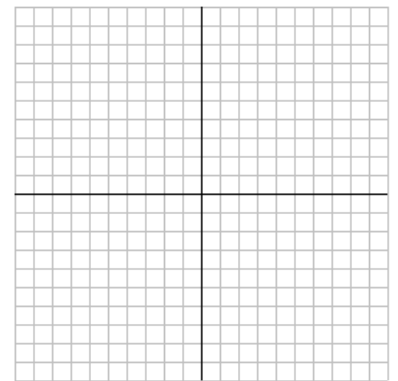
D: R:

11. $f(x) = 3\sqrt[3]{2-x} + 3$



D: R:

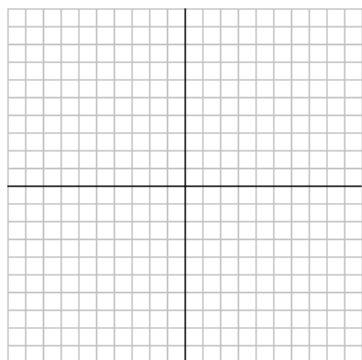
12. $f(x) = -3\sqrt[3]{6-x}$



D: R:

Solve the following systems of equations **both** graphically and algebraically (using substitution).

13. $y = 2\sqrt{x+5}$ and $y = 3\sqrt{x}$



14. $y = \sqrt{x-2}$ and $y = \frac{1}{2}x - 1$

