

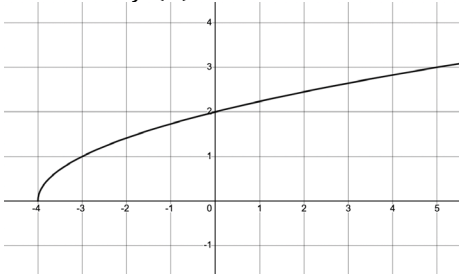
Name: _____

Functions: Domain/Range

Give the domain and range for each function.

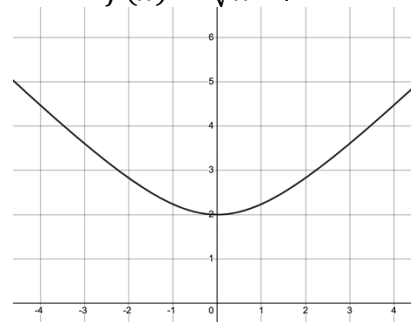
1.

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



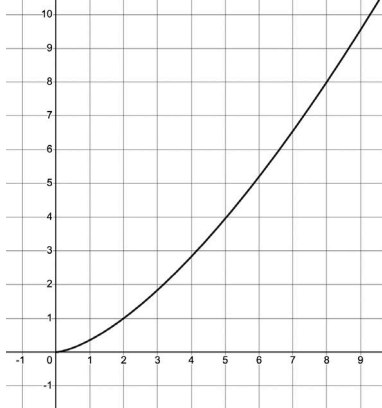
2.

$$f(x) = \sqrt{x^2+4}$$



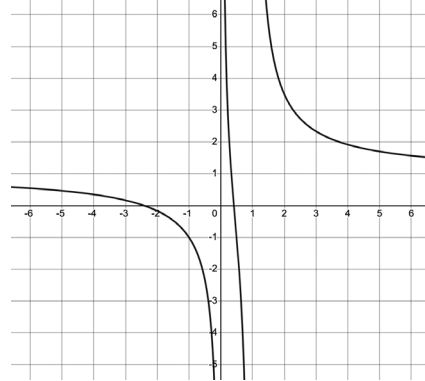
3.

$$f(x) = \frac{\sqrt{0.5x^3}}{2}$$



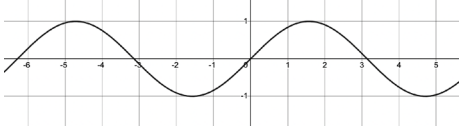
4.

$$f(x) = \frac{x^2 + 2x - 1}{x^2 - x}$$



5.

$$f(x) = \sin x$$



6.

$$f(x) = \frac{x}{x-1}$$

7.

$$f(x) = \frac{x^2 + 1}{x}$$

8.

$$f(x) = 2 \cos x$$

9.

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

10.

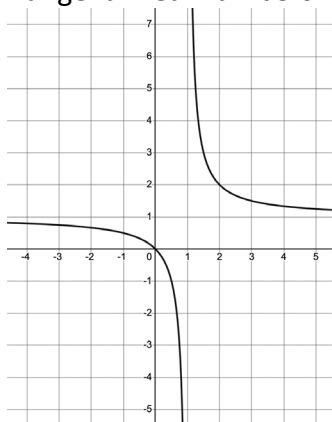
$$f(x) = \frac{\sqrt{x+2}}{x^2 - 9}$$

Name: _____

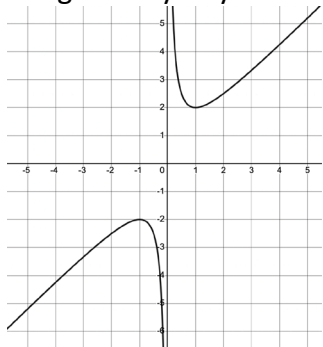
Functions: Domain/Range

Answers:

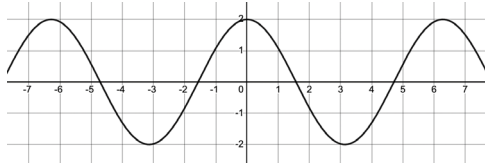
1. Domain: $x \geq -4$
Range: $y \geq 0$
2. Domain: all real numbers
Range: $y \geq 2$
3. Domain: $x \geq 0$
Range: $y \geq 0$
4. Domain: all real numbers: $x \neq 0, x \neq 1$
Range: all real numbers
5. Domain: all real numbers
Range: $-1 \leq y \leq 1$
6. Domain: all real numbers: $x \neq 1$
Range: all real numbers: $y \neq 1$



7. Domain: all real numbers: $x \neq 0$
Range: $-2 \leq y$ or $y \geq 2$



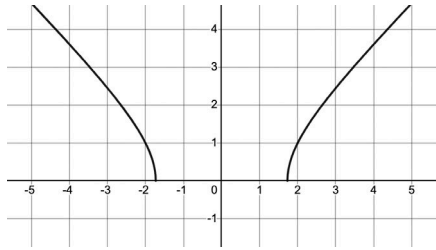
8. Domain: all real numbers
Range: $-2 \leq y \leq 2$



9. Domain: $x + \sqrt{3} \leq 0$ or $x \geq \sqrt{3}$
Range: $y \geq 0$

Name: _____

Functions: Domain/Range



10. Domain: $-2 \leq x < 3$ or $x > 3$
Range: all real numbers

