

5.2 - Classwork

Graphing Rational Functions

Name _____

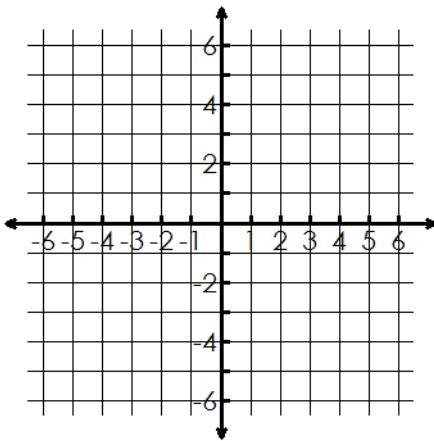
1. $f(x) = \frac{3x - 4}{x - 2}$

VA: _____ HA: _____ Slant: _____

x-int: _____ y-int: _____ Holes: _____

Domain: _____ Range: _____

inc: _____ dec: _____



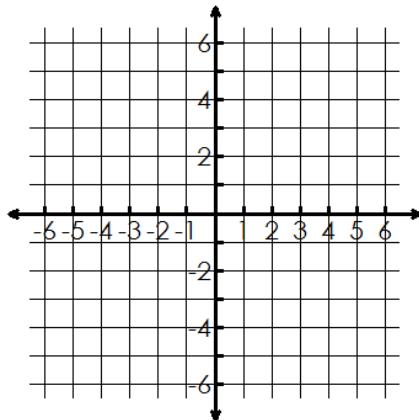
3. $f(x) = \frac{2x - 1}{x + 3}$

VA: _____ HA: _____ Slant: _____

x-int: _____ y-int: _____ Holes: _____

Domain: _____ Range: _____

inc: _____ dec: _____



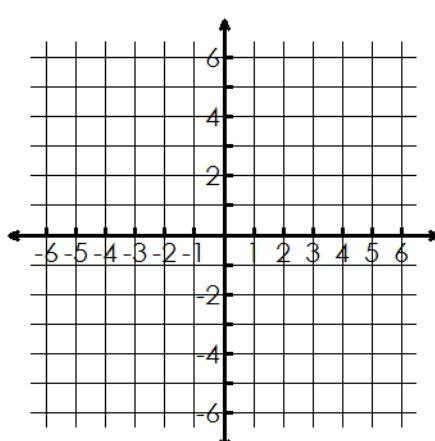
2. $f(x) = \frac{2x^2 - 18}{x^2 - 4}$

VA: _____ HA: _____ Slant: _____

x-int: _____ y-int: _____ Holes: _____

Domain: _____ Range: _____

inc: _____ dec: _____



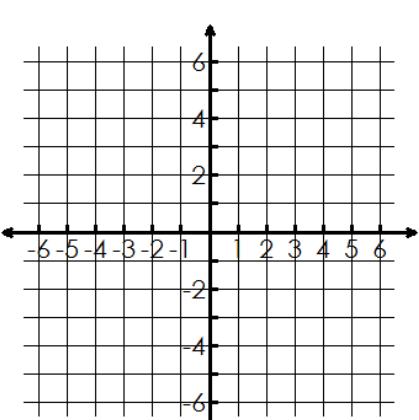
4. $f(x) = \frac{2x^2 + 3x - 2}{x^2 - 9}$

VA: _____ HA: _____ Slant: _____

x-int: _____ y-int: _____ Holes: _____

Domain: _____ Range: _____

inc: _____ dec: _____



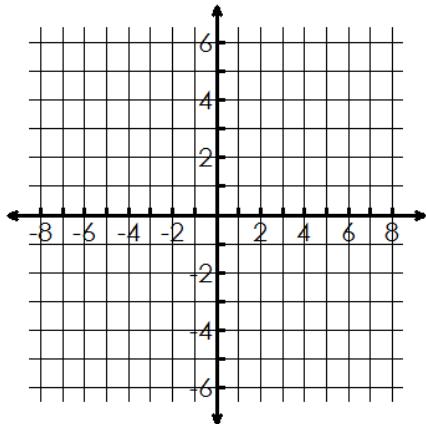
5. $f(x) = \frac{x^2 + x - 2}{x^2 - 2x + 1}$

VA: _____ HA: _____ Slant: _____

x-int: _____ y-int: _____ Holes: _____

Domain: _____ Range: _____

inc: _____ dec: _____



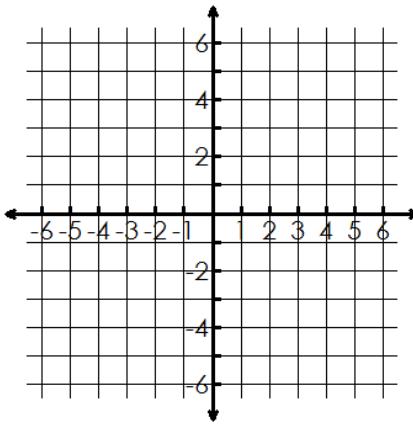
6. $f(x) = \frac{x^2 - x}{x + 1}$

VA: _____ HA: _____ Slant: _____

x-int: _____ y-int: _____ Holes: _____

Domain: _____ Range: _____

inc: _____ dec: _____



7. Write a rational equation with vertical asymptotes of $x = 1, x = -2$.

8. Write a rational equation with no vertical asymptotes and a horizontal asymptote of $y = 0$.

9. Write a rational equation with vertical asymptotes of $x = 0, x = \frac{5}{2}$ and horizontal asymptote of $y = 2$.

10. Write a rational equation with vertical asymptote of $x = -1$, a horizontal asymptote of $y = 2$ and a zero at $x = 3$.

11. Write an equation for graph.

