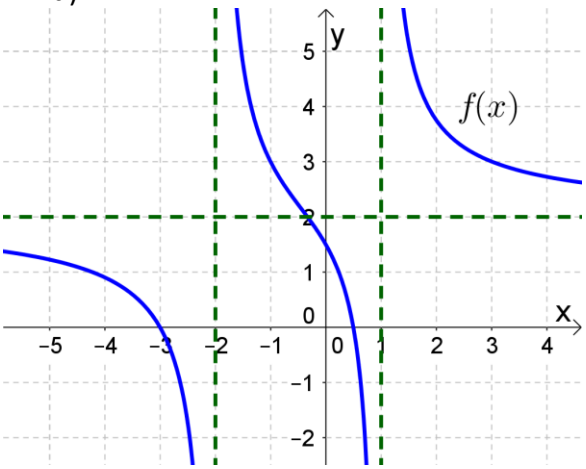
1.

a) $\{x|x \neq -2, 1\}$ or $(-\infty, -2) \cup (-2,1) \cup (1, \infty)$

b) x-intercepts: $x = \frac{1}{2}$ and $x = -3$; y-intercept: $y = \frac{3}{2}$

c) Vertical asymptotes: $x = -2, x = 1$; Horizontal asymptote: $y = 2$; Slant asymptote: none

d)



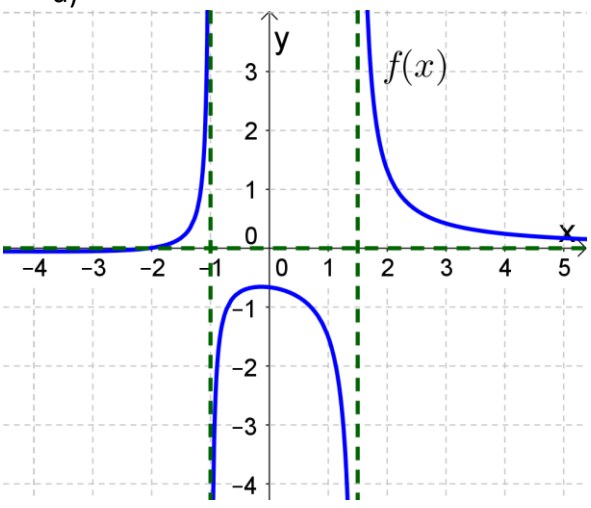
2.

a) $\left\{x\middle|x \neq -1, \frac{3}{2}\right\}$ or $(-\infty, -1) \cup \left(-1, \frac{3}{2}\right) \cup \left(\frac{3}{2}, \infty\right)$

b) x-intercepts: $x = -2$; y-intercept: $y = -\frac{2}{3}$

c) Vertical asymptotes: $x = -1$ and $x = \frac{3}{2}$; Horizontal asymptote: $y = 0$; Slant asymptote: none

d)



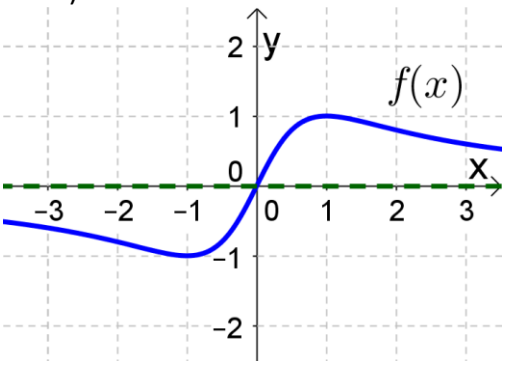
3.

a) $\mathbb{R}$ or $(-\infty, \infty)$

b) x-intercept: $x = 0$; y-intercept: $y = 0$

c) Vertical asymptotes: none; Horizontal asymptote: $y = 0$; Slant asymptote: none

d)



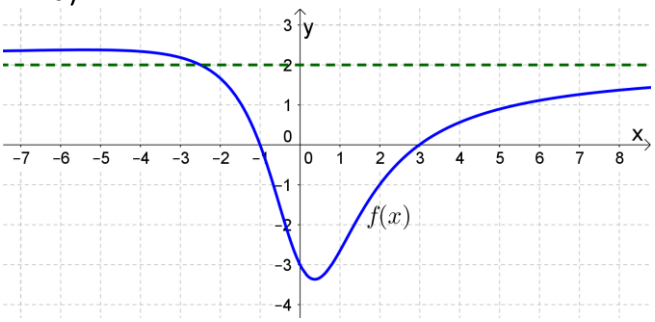
4.

a) $\mathbb{R}$ or $(-\infty, \infty)$

b) x-intercepts: $x = -1$ and $x = 3$; y-intercept: $y = -3$

c) Vertical asymptotes: none; Horizontal asymptote: $y = 2$; Slant asymptote: none

d)



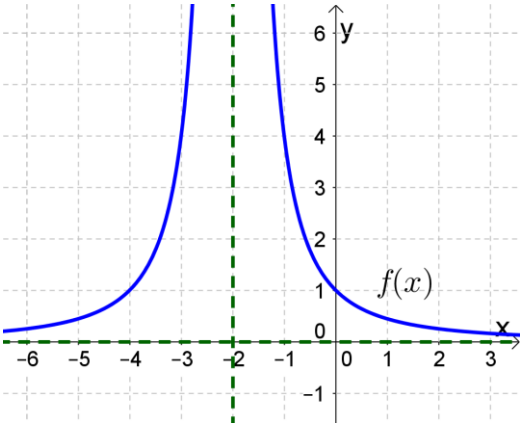
5.

a) $\{x | x \neq -2\}$ or $(-\infty, -2) \cup (-2, \infty)$

b) x-intercept: none; y-intercept: $y = 1$

c) Vertical asymptote: $x = -2$; Horizontal asymptote: $y = 0$; Slant asymptote: none

d)



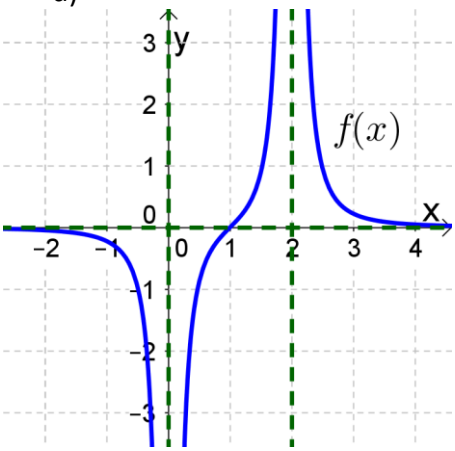
6.

a) $\{x|x \neq 0, 2\}$ or $(-\infty, 0) \cup (0,2) \cup (2, \infty)$

b) x-intercept: $x = 1$; y-intercept: none

c) Vertical asymptotes: $x = 0$ and $x = 2$; Horizontal asymptote: $y = 0$; Slant asymptote: none

d)



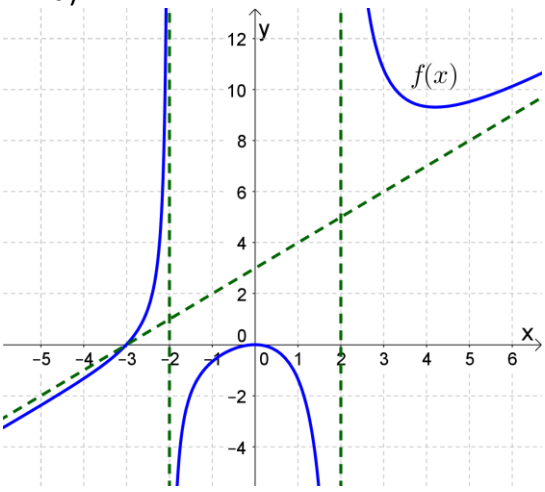
7.

a) $\{x|x \neq \pm 2\}$ or $(-\infty, -2) \cup (-2,2) \cup (2, \infty)$

b) x-intercepts: $x = 0$ and $x = -3$; y-intercept: $y = 0$

c) Vertical asymptotes: $x = -2$ and $x = 2$; Horizontal asymptote: none; Slant asymptote: $y = x + 3$

d)



8.

a) $\{x|x \neq -1, 2\}$ or $(-\infty, -1) \cup (-1,2) \cup (2, \infty)$

b) x-intercept: $x = 1$; y-intercept: $y = \frac{1}{2}$

c) Vertical asymptotes: $x = -1$ and $x = 2$; Horizontal asymptote: none; Slant asymptote: $y = x + 1$

d)