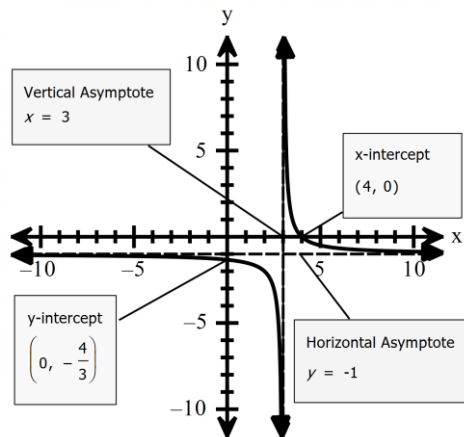**SM3 6.1 odd answers**

1.

3. x-intercept(s): $(1, 0)$
   y-itnercept: $(0, 0.5)$ estimate
   Vertical Asymptote(s): $x = 2$
   Horizontal Asymptote: $y = 1$
   Domain: $(-\infty, 2) \cup (2, \infty)$
   Range: $(-\infty, 1) \cup (1, \infty)$

5. x-intercept(s): DNE
   y-itnercept: $(0, 2)$
   Vertical Asymptote(s): $x = -1, x = 2$
   Horizontal Asymptote: $y = 0$
   Domain: $(-\infty, -1) \cup (-1, 2) \cup (2, \infty)$
   Range: $(-\infty, 0) \cup (1.5, \infty)$ estimate

7. $\lim_{x \to \infty} f(x) = 0$ $\lim_{x \to -\infty} f(x) = 0$

9. They are the same number.

11. x-intercept: none

inc: $(-3, \infty)$

Dec: $(-\infty, -3)$

Pos: none

Neg: $(-\infty, -3) \cup (-3, \infty)$

$\lim_{x \to \infty} f(x) = -2$ $\lim_{x \to -\infty} f(x) = -2$

Vertical Asymptote(s): $x = -3$

Horizontal Asymptote: $y = -2$