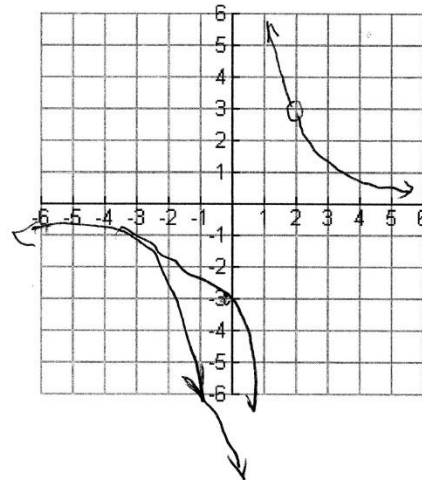


2-7-14

If there is no answer to the blank on this worksheet, write "none".

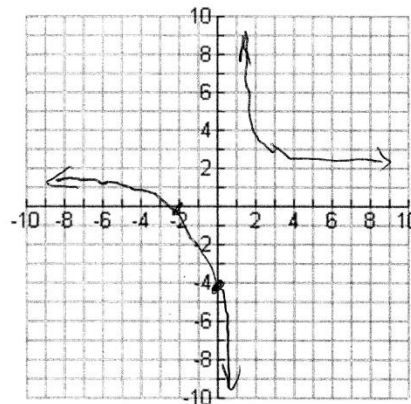
1. Use
- $f(x) = \frac{3x-6}{x^2-3x+2}$
- to find the following:

Accurately graph the function.

Domain $x \in \mathbb{R}$ but $x \neq 2$ $x \neq 1$ Range $y \neq 0$ x-intercept(s) NONEy-intercept $(0, -3)$ horizontal asymptote $y = 0$ vertical asymptote(s) $x = 1$ hole in the graph at $x =$ 2

2. Use
- $f(x) = \frac{2x+4}{x-1}$
- to find the following

Accurately graph the function.

Domain $x \in \mathbb{R}$ but $x \neq 1$ Range $y \neq 2$ x-intercept(s) $(-2, 0)$ y-intercept $(0, -4)$ horizontal asymptote $y = 2$ vertical asymptote(s) $x = 1$ hole in the graph at $x =$ NONE

Key

3. Use $f(x) = 2x^{-1}$ to find the following:

Domain $x \in \mathbb{R} \quad x \neq 0$

Range $y \neq 0 \quad y \in \mathbb{R}$

x-intercept(s) None

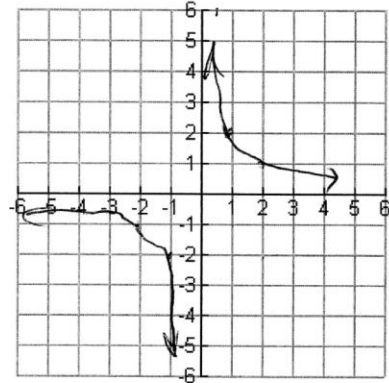
y-intercept None

horizontal asymptote $y = 0$

vertical asymptote(s) $x = 0$

hole in the graph at $x =$ None

Accurately graph the function.



4. Use $f(x) = -3x^{-1}$ to find the following:

Domain $x \in \mathbb{R} \quad x \neq 0$

Range $y \in \mathbb{R} \quad y \neq 0$

x-intercept(s) None

y-intercept None

horizontal asymptote $y = 0$

vertical asymptote(s) $x = 0$

hole in the graph at $x =$ None

Accurately graph the function.

