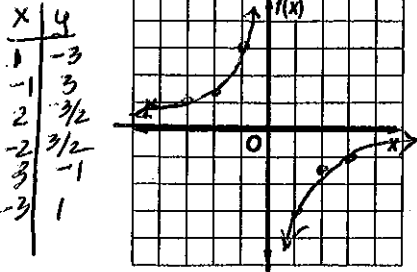


Skills Practice

Graphing Rational Functions

Graph each function. Identify Domain, VA, HA, Holes (Pts of Discontinuity)

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



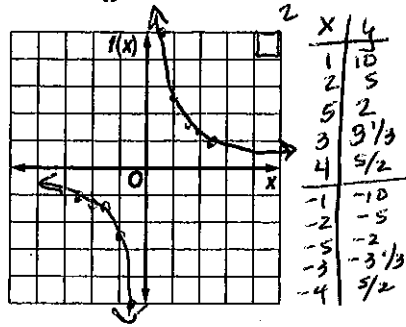
D: all \mathbb{R} exc $x \neq 0$

VA: $x = 0$

HA: $y = 0$

Hole(s): none

$$2. f(x) = \frac{10}{x}$$



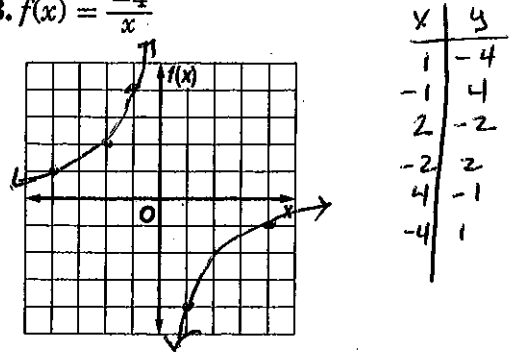
D: all \mathbb{R} exc $x \neq 0$

VA: $x = 0$

HA: $y = 0$

Hole(s): none

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



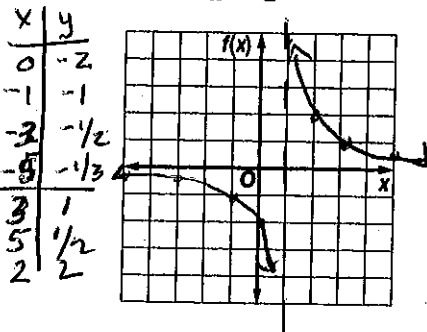
D: all \mathbb{R} exc $x \neq 0$

VA: $x = 0$

HA: $y = 0$

Hole(s): none

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



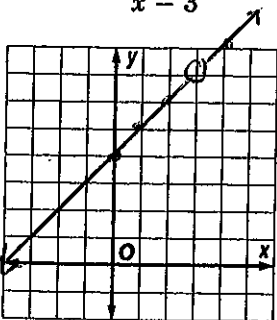
D: all \mathbb{R} exc $x \neq 1$

VA: $x = 1$

HA: $y = 0$

Hole(s): none

$$7. f(x) = \frac{(x+4)(x-3)}{x-3}$$

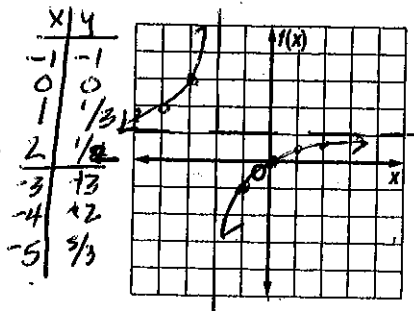


D: all \mathbb{R} exc $x \neq 3$

VA: $x = 3$

Hole(s): $x = 3$

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



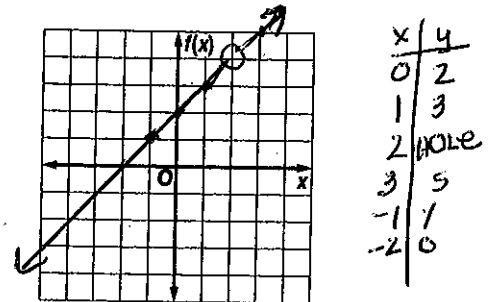
D: all \mathbb{R} exc $x \neq -2$

VA: $x = -2$

HA: $y = 1$

Hole(s): none

$$6. f(x) = \frac{x^2 - 4}{x - 2} = \frac{(x+2)(x-2)}{x-2}$$



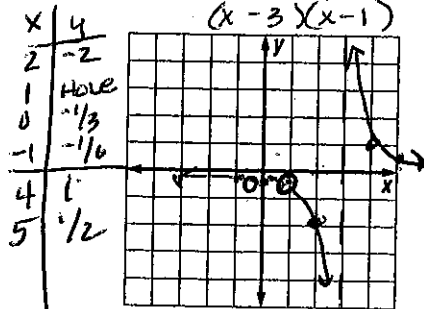
D: all \mathbb{R} exc $x \neq 2$

VA: ~~none~~

HA: none

Hole(s): @ $x = 2$

$$8. f(x) = \frac{x-1}{x^2 - 4x + 3} = \frac{x-1}{(x-3)(x-1)}$$



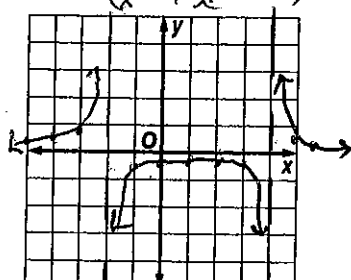
D: all \mathbb{R} exc $x \neq 3$

VA: $x = 3$

HA: $y = 0$

Hole(s): $x = 1$

$$9. f(x) = \frac{3}{x^2 - 2x - 8} = \frac{3}{(x-4)(x+2)}$$



D: all \mathbb{R} exc $x \neq 4, -2$

VA: $x = 4$

VA: $x = -2$

HA: $y = 0$

Hole(s): none