



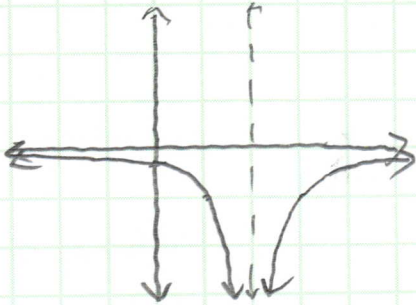
Advanced Math

pg 280

46) Domain: \mathbb{R} except $\{2\}$

Horizontal: $y=0$

Vertical: $x=2$



49) Domain: \mathbb{R} except $\{0, 2\}$

Horizontal: $y=0$

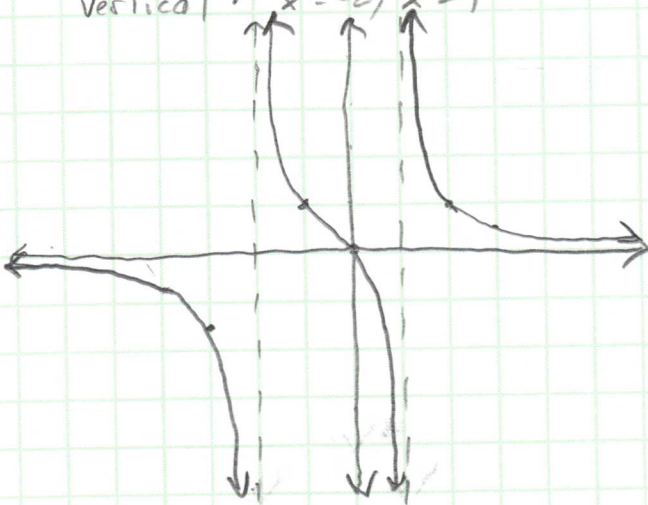
Vertical: $x=0, x=2$



50) Domain: \mathbb{R} except $\{-2, 1\}$

Horizontal: $y=0$

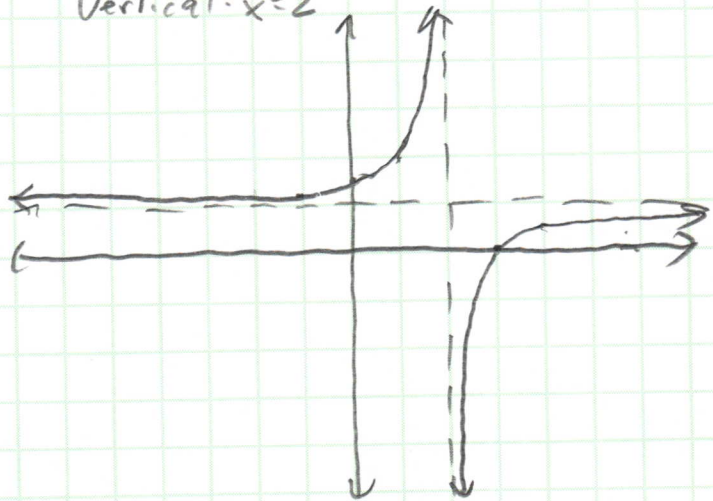
Vertical: $x=-2, x=1$



52) Domain: \mathbb{R} except $\{2\}$

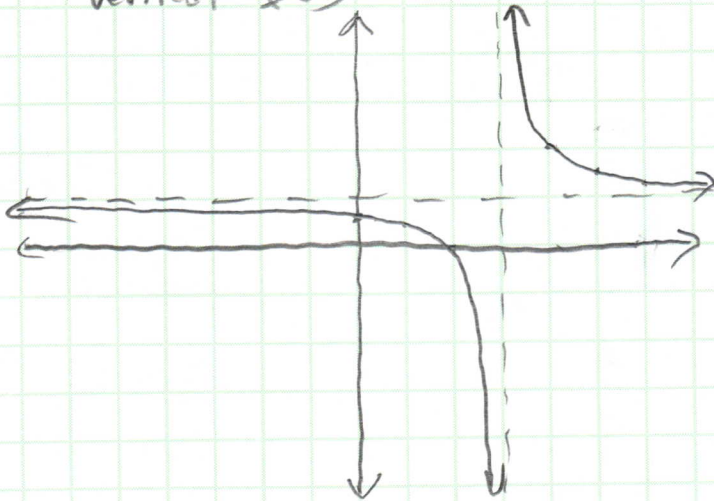
Horizontal: $y=1$

Vertical: $x=2$



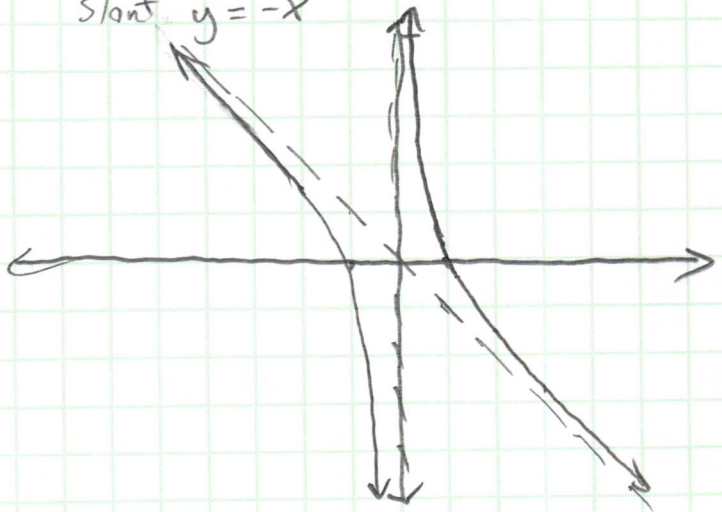


54) Domain: \mathbb{R} except $\{3\}$
 Horizontal $y=1$
 Vertical $x=3$



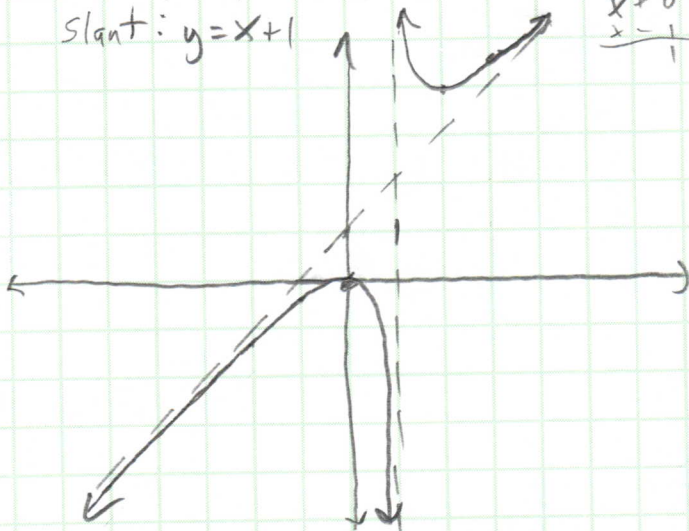
70) Domain: \mathbb{R} except $\{0\}$ $x+0$
 Vertical: $x=0$
 Slant: $y=-x$

$$\frac{-x}{-x^2+0x+1}$$

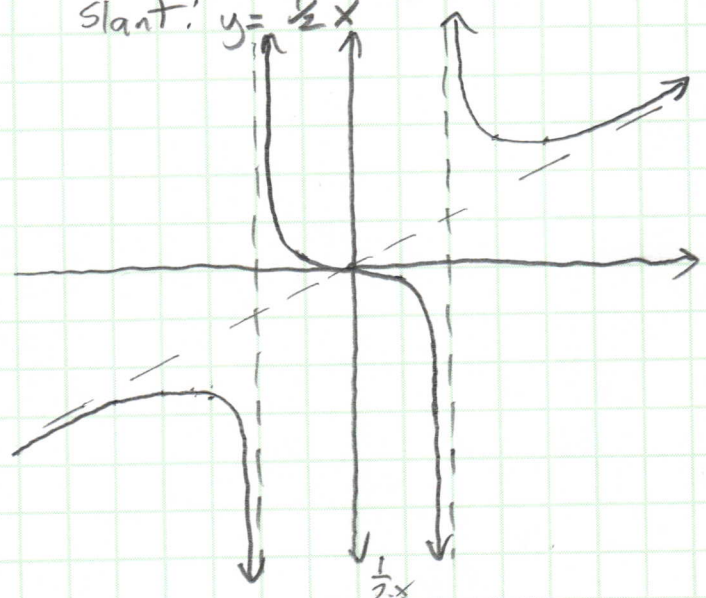


72) Domain: \mathbb{R} except $\{1\}$ $x-1$
 Vertical: $x=1$
 Slant: $y=x+1$

$$\frac{x+1}{x^2+0x+0}$$



74) Domain: \mathbb{R} except $\{2, -2\}$
 Vertical: $x=2, x=-2$
 Slant: $y=\frac{1}{2}x$



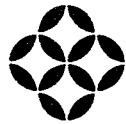
$$\frac{2x^2+0x-8}{x^3+0x^2+0x+0}$$

$$\frac{x^3+0x^2+4x}{4x+0}$$



OLYMPIC STEEL

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1-612-544-7100

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$$h(x) = \frac{x^2 - x - 12}{x^2 + x - 20}$$

Domain: \mathbb{R} except $\{4, -5\}$

horizontal: $y=0$

vertical: $x=-5$

slant: none

$$h(x) = \frac{(x-4)(x+3)}{(x-4)(x+5)}$$



x	y
0	$\frac{3}{5}$
-3	0
-4	-1
4	\emptyset ($\frac{7}{9}$)
-6	3

$$R(x) = \frac{x^3 + 2x^2 - 5x - 6}{x^2 - 4} = \frac{(x+1)(x-2)(x+3)}{(x+2)(x-2)}$$

Domain: \mathbb{R} except $\{\pm 2\}$

Hole: $x=2$

Horizontal Asymptote: none

Vertical Asymptote: $x=-2$

slant Asymptote: $y=x+2$

$$(x+1)(x+3) = \frac{x^2 + 4x + 3}{x+2}$$

Zeros: $\{-1, -3\}$

y-int: $(0, \frac{3}{2})$

	1	4	3
-2		-2	-4
	1	2	11-1

$$(x+2) - \frac{1}{x+2}$$

