con't . . . pg. 20

① $\frac{y}{1} = \frac{2x^2+5}{x^2-25} = \frac{2x^2+5}{(x+5)(x-5)}$

✓ No holes

✓ VA: $x+5 \neq 0$ $x-5 \neq 0$

$x = -5$ $x = 5$

✓ HA: $y = \frac{2}{1} = 2$

y int: $(0, \frac{5}{-25}) = (0, -\frac{1}{5})$

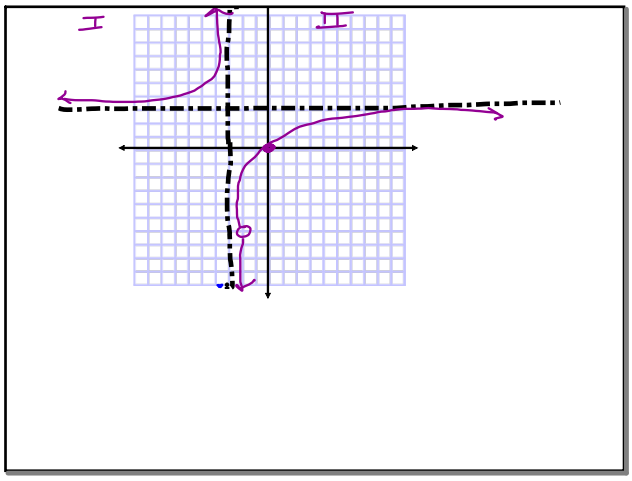
x int: ~~0~~

$0 = 2x^2 + 5$

$-5 = 2x^2$

$\sqrt{\frac{5}{2}} = \sqrt{x^2}$

Oct 13-8:21 AM



Oct 13-8:33 AM

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

✓ Holes: $x+2=0$, $x=-2$

✓ VA: $x+3 \neq 0$, $x = -3$

✓ HA: $y = 3$

✓ Int: y int (0,0)

x int (0,0) $0 = 3x$

Oct 13-9:02 AM

③ $y = \frac{x^3}{x^2-9} = \frac{x^3}{(x+3)(x-3)}$

✓ No holes

✓ VA: $x+3 \neq 0$ $x-3 \neq 0$

$x = -3$ $x = 3$

✓ HA: no HA

slant

$y = x$

$x^2-9 \overline{)\, x^3}$

$-x^3+9x$

$9x$

✓ Int: (0,0) y int

(0,0) x int

$0 = x^3$

Oct 13-8:51 AM

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

✓ No Holes

✓ VA: $x+4 \neq 0$ $x-2 \neq 0$

$x = -4$ $x = 2$

✓ HA: $y = 0$

✓ Int: (0,0) y int

(0,0) x int $0 = 3x$

$0 = x$

Oct 13-8:39 AM