Regular Time	Period	Short Schedule
8:00	1	8:00-8:40
9:00	2	8:45-9:25
10:00	3	9:30-10:10
11:00	4	10:15-10:55
12:45	6	11:00-11:40
Noon	Lunch	11:45
1:45	7	12:15-12:55
2:45	8	1:00-1:40

Turn in homework:

3.3 #35;

3.4 #17-31odd, 51,53;

3.4 #55-69odd, 95-98all, 79, 89, 93;

3.5 #7-25odd

When you are finished with your quiz, begin working 3.5 #27-67 odd

3.5

19. $g(x) = \dfrac{x^3 - 2x^2 + x - 1}{x^2 - 16}$

since degree of num > deg. of denom, no horizontal asymptote

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

$$\begin{array}{r} x - 3 \\ x^2+2x-1 \overline{)\, x^3 - x^2 + x - 4} \\ -(x^3 + 2x^2 - x) \\ \hline -3x^2 + x - 4 \end{array}$$

O.A.: $y = x - 3$

23. $h(x) = \dfrac{x^4-2}{x^3+1}$

$$x^3+1 \;\overline{)\; x^4-2}$$

$$\begin{array}{r} x \\ \hline x^3+1 \;\overline{)\; x^4-2} \\ -(x^4+x) \\ \hline -x-2 \end{array}$$

$$x + \frac{-x-2}{x^3+1}$$

$y = x$

50. $f(x) = \dfrac{3x}{x^2+5x+4} = \dfrac{3x}{(x+1)(x+4)}$

zeros: 0 ; y-int: (0,0)

V.A.: $x=-1$, $x=-4$

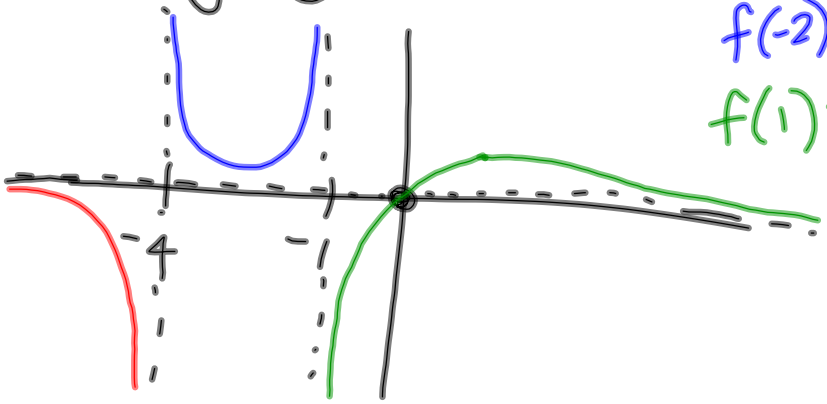
end behavior: $\dfrac{3x}{x^2} = \dfrac{3}{x} \to 0$ as $x \to \pm\infty$

H.A.: $y=0$

$f(-5) = \frac{-}{--} < 0$

$f(-2) = \frac{-}{-+} > 0$

$f(1) = \frac{+}{++} > 0$



68. $f(x) = \dfrac{x^2-x-2}{x+2} = \dfrac{(x-2)(x+1)}{x+2}$

zeros: $2, -1$; y-int: $(0,1)$

V.A.: $x = -2$

$$x+2 \overline{)\, x^2-x-2}$$

$$x-3$$

$$-(x^2+2x)$$

$$-3x-2$$

O.A.: $y = x-3$