

# H. Algebra II Review KEY

## Part 5 - Rational Functions

5a1]  $\frac{x^2+1}{x^2-1}$

5a2]  $\frac{1}{x^2+x}$

5a3]  $-\frac{3}{10}$

5a4]  $\frac{y-x}{x+y}$

5b1]  $x = -6, 3$

5b2]  $x = \frac{3}{2}, \frac{5}{2}$

5b3]  $x = -2, -1$

5b4]  $x = -\frac{1}{2}, 3$

5c1]

D: All real #'s except  $\frac{1}{3}, -7$

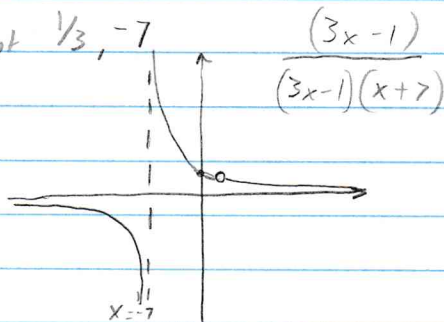
x-int: none

y-int:  $(0, \frac{1}{7})$

V.A.:  $x = -7$

H.A.:  $x = 0$

Holes:  $x = \frac{1}{3}$



5c2]

D: All real #'s

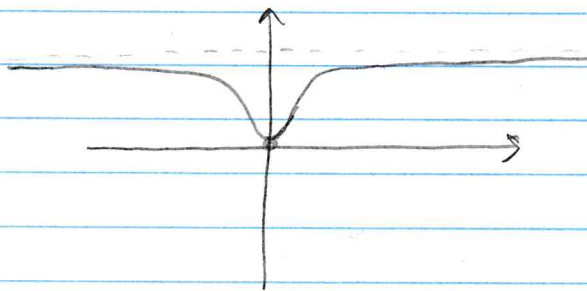
x-int:  $(0, 0)$

y-int:  $(0, 0)$

V.A.: None

HA:  $y = 4$

Holes: none



5c3]

D: All real #'s except  $-2$  and  $2$

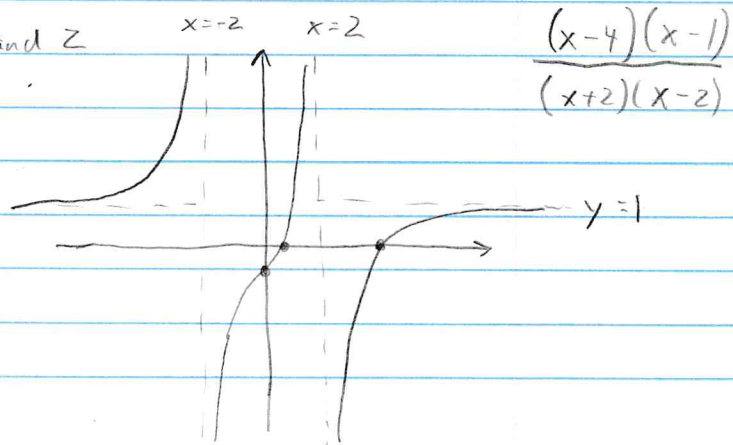
x-int:  $(4, 0), (1, 0)$

y-int:  $(0, -1)$

V.A.:  $x = -2, x = 2$

HA:  $y = 1$

Holes: none



5c4] D: All real numbers except -3, 2

x-int: (0,0)

y-int: (0,0)

VA:  $x=2$

HA:  $y=1$

holes:  $x=-3$

