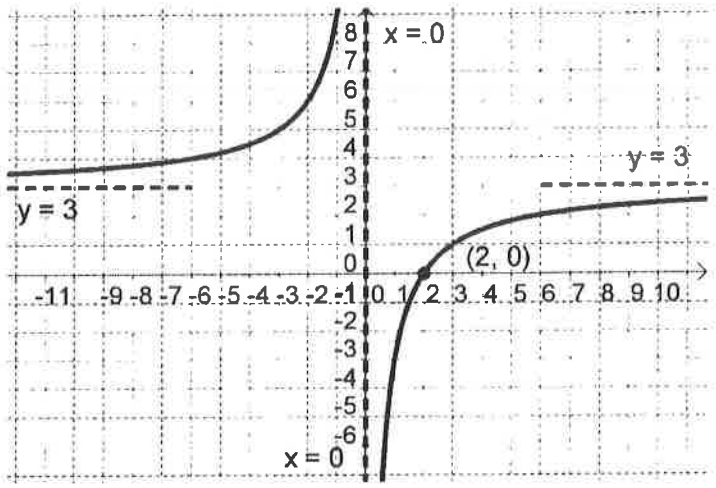
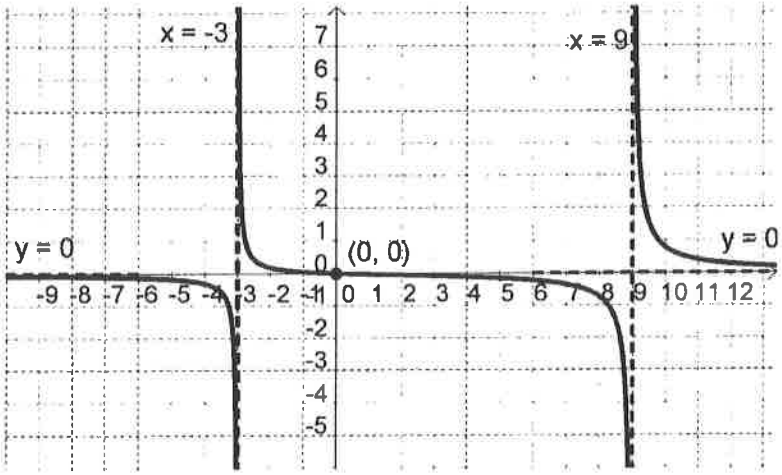
Algebra 2H/Trig Worksheet 4.2.4
Rational Functions Review

ANSWERS:

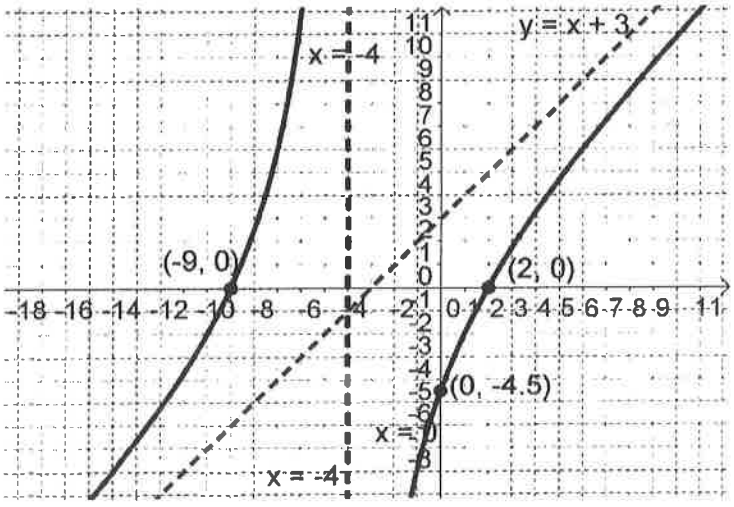
1. **V.A:** $x = 0$
   Root: 2
   y-int: none
   H.A.: $y = 3$
   Hole: none



2. **V.A:** $x = -3,\ x = 9$
   Root: 0
   y-int: 0
   H.A.: $y = 0$
   Hole: none

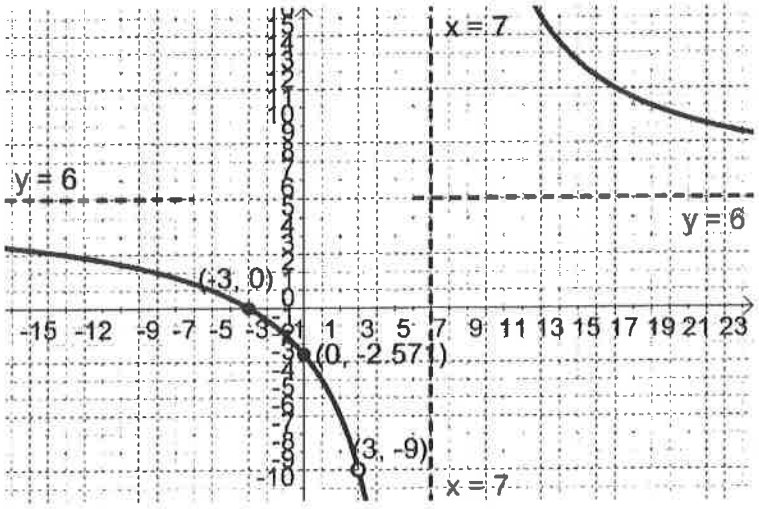


3. **V.A:** $x = -4$
   Root: $-9,\ 2$
   y-int: $-\frac{9}{2}$
   Slant Asymptote: $y = x + 3$
   Hole: none

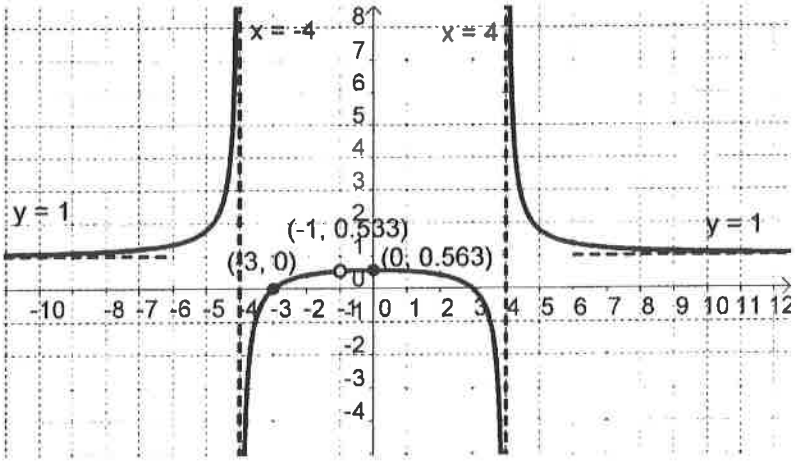


ANSWERS (continued):

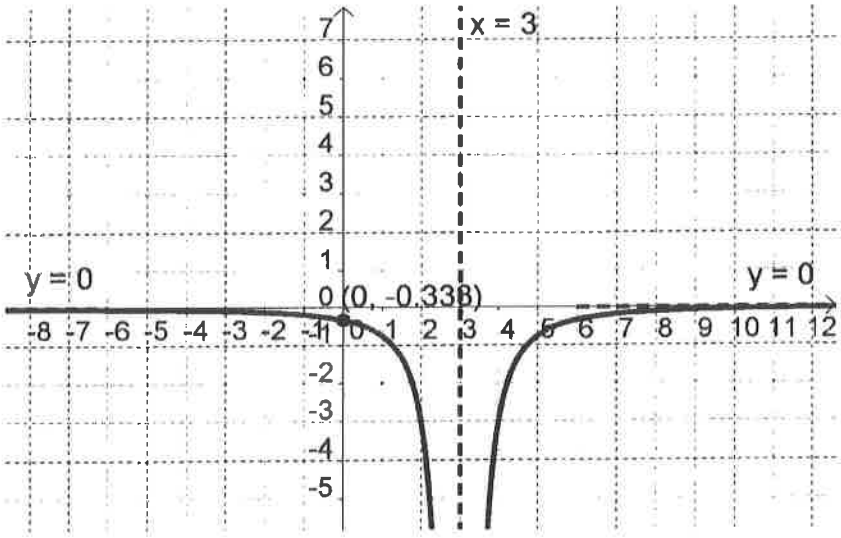
4. **V.A:** $x = 7$
   Root: -3
   y-int: $-\frac{18}{7}$
   H.A.: $y = 6$
   Hole: $(3, -9)$



5. **V.A:** $x = -4,\ x = 4$
   Root: $-3, 3$
   y-int: $\frac{9}{16}$
   H.A.: $y = 1$
   Hole: $\left(-1, \frac{8}{15}\right)$



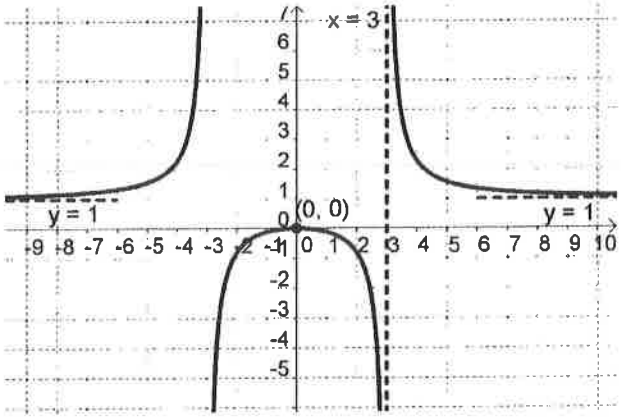
6. **V.A:** $x = 3$
   Root: none
   y-int: $-\frac{1}{3}$
   H.A.: $y = 0$
   Hole: none



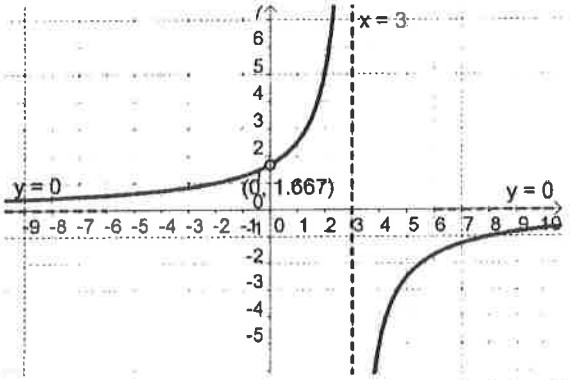
Algebra 2H/Trig Worksheet 4.2.4
Rational Functions Review

ANSWERS (continued):

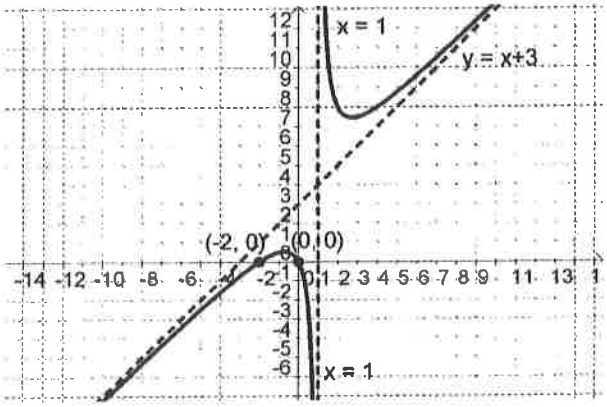
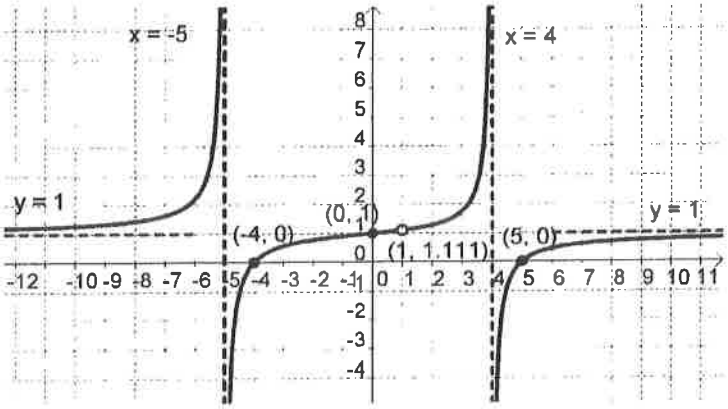
7. **V.A:** $x=-3,\ x=3$
   Root: 0
   y-int: 0
   H.A.: $y=1$
   Hole: none



8. **V.A:** $x=3$
   Root: none
   y-int: none
   H.A.: $y=0$
   Hole: $\left(0, \frac{5}{3}\right)$



9. **V.A:** $x=1$
   Root: $0, -2$
   y-int: 0
   Slant Asymptote: $y=x+3$
   Hole: none



10. **V.A:** $x=-5,\ x=4$
    Root: $-4, 5$
    y-int: 1
    H.A.: $y=1$
    Hole: $\left(1, \frac{10}{9}\right)$