

1.3c pg 30: 8, 19-20, 26-27, 33-36, 50

8. Discontinuous at  $x=0$ , infinite discontinuity  
Continuous at  $x=6$

19 No zeros between  $[-2,4]$

20.  $(6,7)$

26. as  $x \rightarrow -\infty$ ,  $f(x) \rightarrow -\infty$

as  $x \rightarrow \infty$ ,  $f(x) \rightarrow \infty$

27. as  $x \rightarrow -\infty$ ,  $f(x) \rightarrow 0$

as  $x \rightarrow \infty$ ,  $f(x) \rightarrow 0$

33. as  $x \rightarrow \infty$ ,  $f(x)$  will decrease, approach 0

34. as  $x \rightarrow \infty$ ,  $f(x)$  will decrease, approach 0

35. as  $x \rightarrow \infty$ ,  $f(x) \rightarrow 1$

36. as  $x \rightarrow \infty$ ,  $f(x) \rightarrow 1/2$

50. a graph

b. 760,822 vehicles

c. No, there won't be infinite alt. fuel vehicles.