Asymptotes Worksheet

Find the vertical asymptotes for function in problems 1-5. Find the horizontal/slant/curvilinear asymptotes of functions in problems 6 - 10.

1. $f(x) = \frac{1}{x+17}$
2. $f(x) = \frac{x^2-9}{x^2+2x-3}$
3. $f(x) = \frac{2x+1}{x^2-4}$
4. $f(x) = \frac{4x^2+4x+1}{6x^2+x-1}$
5. $f(x) = \frac{5x-1}{25x^2+1}$
6. $f(x) = \frac{3x^2-9}{x-3}$
7. $f(x) = \frac{2x^3}{x^2+1}$
8. $f(x) = \frac{2x^2+1}{x^2+1}$
9. $f(x) = \frac{-x^3+2x^2}{x+7}$
10. $f(x) = \frac{5x^6+4x^4}{2x^3-1}$
