1004 HW-A

1. Find the vertical asymptotes

$$f(x) = \frac{3x + 4}{x^2 - 16}$$

2. Find the derivative by the limit process

$$f(x) = \frac{1}{x - 1}$$

3. Find the derivative

   (a)
   $$f(x) = \frac{x^3 - 3x^2 + 4}{x^2}$$

   (b)
   $$f(x) = \frac{3(1 - \sin x)}{2 \cos x}$$