NAME:

Find the derivative of each function.

1. (5 points)
$$f(x) = x^2 \cos x$$

2. (5 points)
$$y = \frac{x^3 + 1}{x^2}$$

3. (5 points) $y = \frac{x \sin x}{2x+1}$

4. (5 points) $g(x) = \sin^2(5x)$