1. If \( y = 3x^2 + 5x - 2 \), find the equation of the tangent and normal lines to the curve at \( P(0, -2) \).

2. Evaluate the following limits if they exist. Briefly indicate any limit rules that you apply. If the limits do not exist, then explain why.
   
a. \( \lim_{x \to 2} \frac{x^2 + x - 6}{2 + x - x^2} \)
   
b. \( \lim_{t \to 0} \frac{\sqrt{t^2 + 9} - t}{t + 2} \)
   
c. \( \lim_{t \to -4} \frac{t + 4}{|t + 4|} \)
3. Evaluate the limit, indicating briefly the limit rule applied: \( \lim_{x \to 0} \frac{\sin(3x)}{x \cos(2x)} \)

4. Evaluate the limit, indicating briefly the limit rule applied: \( \lim_{t \to 1} \frac{\frac{1}{3-t} - \frac{1}{2}}{(t - 1)} \)

5. The cost of postage is $0.37 for the first ounce, and $0.23 for each additional ounce. Plot the cost of the postage as a function of its weight from 0 to 5 ounces. At which points will this function have a limit? Which not? Discuss the one-sided limits at points in \([0, 5]\) where the limit does not exist.