## Worksheet 10/02/2024

1) Find the derivative of the given functions. Don't simplify your answer.

a) 
$$f(t) = (t^3 + 2)(2t^2 + 3t - 7)$$

b) 
$$g(x) = \frac{x^2 + 2x - 2}{x^2 - 1}$$

c) 
$$f(x) = \sqrt{x^3} + \sqrt[5]{x^7}$$

d) 
$$f(y) = \frac{y^3 - y + 1}{y^2}$$

2) Find the equation of the tangent line and the normal line to the graph of function  $f(x) = \frac{x-1}{x^2+1}$  at the point  $\left(2, \frac{1}{5}\right)$ .