$\qquad$

## Panther ID:

$\qquad$
Quiz 2 - MAC 2281, Spring 2019
To receive credit you MUST SHOW ALL YOUR WORK. Answers which are not supported by work will not be considered.

1. ( 8 pts ) Compute the derivative of each of the following functions. You don't have to simplify.
(a) $y=\left(x^{3}+x\right)^{6}$
(b) $y=x^{2} e^{-3 x}$
(c) $y=\sec (\tan x)$

$$
y=\sin ^{4}(\sqrt{x})
$$

2. ( 3 pts ) Find the values of $x$ at which the tangent line to the graph of $y=\frac{x^{2}-3}{x+2}$ is horizontal.
