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Quiz $2-$ MAC 2311, Fall 2015
To receive credit you MUST SHOW ALL YOUR WORK. Answers which are not supported by work will not be considered.

1. (2 pts) Fill in below the definition with limit of the derivative. Be precise.

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f^{\prime}(x)=
$$

2. ( 6 pts ) Find the derivative of each of the following functions. You don't have to simplify.
(a) $f(x)=5 x^{4}-4 \sqrt{x}$
(b) $g(x)=(3 x-1)\left(x^{3}+\pi^{4}\right)$
(c) $h(x)=\frac{x}{x^{2}+2}$
3. (4 pts) Find the equation of the tangent line to the graph of $f(x)=x-\frac{2}{x}$ at $x=2$.
