M250 Quiz
P. Staley

1. State the definition for the derivative of $f(x)$ with respect to $x$.
2. Fill in the table of derivatives:

| Function | Derivative with respect to x |
| :---: | :--- |
| c |  |
| x |  |
| $\mathrm{x}^{\mathrm{n}}$ |  |
| $\mathrm{f}(\mathrm{x})+\mathrm{g}(\mathrm{x})$ |  |
| $\mathrm{f}(\mathrm{x}) \mathrm{g}(\mathrm{x})$ |  |
| $\mathrm{f}(\mathrm{x}) / \mathrm{g}(\mathrm{x})$ |  |
| $\mathrm{c} \mathrm{f}(\mathrm{x})$ |  |
| $\mathrm{f}(\mathrm{y})$ |  |
| $\mathrm{f}(\mathrm{g}(\mathrm{x}))$ |  |
| $\sin (\mathrm{x})$ |  |
| $\cos (\mathrm{x})$ |  |
| $\tan (\mathrm{x})$ |  |
| $\sec (\mathrm{x})$ |  |

