# Quiz 10 Key - MA161 - October 3, 2018 

 Alden Bradford| Min | Mean | Max |
| :---: | :---: | :---: |
| 5 | 16 | 20 |

1. (12 points) Differentiate both sides of the equation with respect to $x$. You do not have to solve for anything. Just differentiate.

$$
\begin{aligned}
& \sin (x)+3 x y=y^{3} \\
& \cos (x)+3 y+3 x y^{\prime}=3 y^{2} y^{\prime}
\end{aligned}
$$

2. (8 points) Find $y^{\prime \prime}$ given that $y=\tan (x)$.

$$
2 \sec ^{2}(x) \tan (x)
$$

