Quiz

Name: _____

Find the following derivatives:

1. $f(x) = 3x^4 - 9x^3 + 2x - 3$

$f'(x) =$

2. $D = 4^{\frac{1}{3}} - \frac{7}{t^2}$

$\frac{dD}{dt} =$

3. $s = \frac{\sqrt[3]{A}}{6}$

$\frac{ds}{dA} =$

4. $T(\theta) = \sin\theta + 4\cos\theta + 6\tan\theta$

$T'(\theta) =$

5. $F(x) = 3 \cdot 9^x$
$F'(x) =$

6. Write the microscope equation for $y = 2 - x^3$ at the point where $x = 2$.

7. The graph of $y = f(x)$ is given below. Graph the derivative $f = f'(x)$ on the same axis.