Find the following derivatives:
1. \( f(x) = 3x^4 - 9x^3 + 2x - 3 \)
   \( f'(x) = \)

2. \( D = 4\frac{1}{2} - \frac{7}{t^2} \)
   \( \frac{dD}{dt} = \)

3. \( s = \frac{3\sqrt{A}}{6} \)
   \( \frac{ds}{dA} = \)

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.