

Practice Quiz 5

Find $f'(x)$

1) $f(x) = \sqrt{4x - \sin(3x)}$

2) $f(x) = \ln(\ln(7x))$

3) $f(x) = 12 \tan^2(4x)$

4) $f(x) = 9^{\sec x}$

5) $f(x) = 6\sqrt{x} - \cot x + 12$

6) $f(x) = -3xe^x - 4e^x$

7) $f(x) = \log(7x - 11)$

8) $f(x) = \frac{1}{\sqrt[3]{4-x^2}}$

9) $f(x) = \sec^3 x - \tan(2x)$

10) $u(-4) = 6$, $u'(4) = -3$, $v(2) = 4$, $v'(2) = -4$.

$f(x) = u(v(x))$, find $f'(2)$.

11) $u(-1) = 6$, $u'(-1) = 10$, $v(-1) = 8$, $v'(-1) = 2$

Find $\frac{d}{dx} \left(\frac{u}{v} \right)$ @ $x = -1$.

$$\frac{x^3 + x^2 - 6x}{x^2 - 4}$$