

## CALCULUS WORKSHEET

Differentiate the following functions:

1.  $f(x) = 5$

2.  $f(x) = -2x$

3.  $f(x) = \sqrt{x}$

4.  $f(x) = \sqrt[3]{x^2} + \sqrt{x}$

5.  $f(x) = e^{3-x^2}$

Answer Sheet:

1.  $f'(x) = 0$

2.  $f'(x) = -2$

3.  $f'(x) = \frac{1}{2\sqrt{x}}$

4.  $f'(x) = \frac{2x}{3(x^2)^{\frac{2}{3}}} + \frac{1}{2\sqrt{x}}$

5.  $f'(x) = -2xe^{3-x^2}$