

## HW 15: Unit 3.1 Derivative of a function

Find the slope of the tangent line at the given point.

1.  $f(x) = 2x^2 - 3x$  at  $x = 3$

2.  $f(x) = x^2 + 4x$  at  $x = 1$

$f'(x) = \underline{\hspace{2cm}}$

$f'(x) = \underline{\hspace{2cm}}$

$m = f'(3) = \underline{\hspace{2cm}}$

$m = f'(1) = \underline{\hspace{2cm}}$

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

4.  $f(x) = 2 - 4x$  at  $x = 2$

$f'(x) = \underline{\hspace{2cm}}$

$f'(x) = \underline{\hspace{2cm}}$

$m = f'(-2) = \underline{\hspace{2cm}}$

$m = f'(2) = \underline{\hspace{2cm}}$

5.  $f(x) = x^3 + 1$  at  $x = 3$

6.  $f(x) = x^2 - 4x + 3$  at  $x = 0$

$f'(x) = \underline{\hspace{2cm}}$

$f'(x) = \underline{\hspace{2cm}}$

$m = f'(3) = \underline{\hspace{2cm}}$

$m = f'(0) = \underline{\hspace{2cm}}$