

# Quiz 5

*Name:*

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1. Let  $f(x) = 3x^3 - 4x^2 + x - 7$  .

(a) Compute  $f'(x)$  .

(b) What is the slope of  $f(x)$  when  $x = 1$  ? What does that tell you?

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

(a) Compute  $f'(x)$  .

(b) What is the slope of  $f(x)$  when  $x = 1$  ? What does that tell you?

3. Let  $f(x) = e^x - x^e$  .

(a) Compute  $f'(x)$ .

(b) What is the slope of  $f(x)$  when  $x = 1$  ? What does that tell you?