**1.** (1 point)
Let $f(x) = 7 + \frac{6}{x} + \frac{7}{x^2}$.

$f'(x) =$ _____

$f'(1) =$ _____

$f''(x) =$ _____

$f''(1) =$ _____

*Answer(s) submitted:*

- 
- 
- 
- 

(incorrect)

**2.** (1 point)
Let $f(x) = \sqrt{x^2+10}$.

$f'(x) =$ _____

$f'(4) =$ _____,

$f''(x) =$ _____

$f''(4) =$ _____

*Answer(s) submitted:*

- 
- 
- 
- 

(incorrect)

**3.** (1 point)
Let

$$f(x) = \frac{x^2+7x+12}{4x+16}$$

(a) $f'(5) =$ _____

(b) $f''(5) =$ _____

[NOTE: There are two ways to do this problem. The first is the quotient rule. The second is much easier and does not use the quotient rule.]

*Answer(s) submitted:*

- 
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(incorrect)

**4.** (1 point)
Evaluate the definite integral:

$$\int_1^4 \frac{t^{11}-t^5}{t^8}\,dt = \_\_\_\_\_$$

*Answer(s) submitted:*

- 

(incorrect)

**5.** (1 point) Evaluate the indefinite integral:

$$\int \left(5s^4 - 5s^5\right)\,ds = \_\_\_\_\_ + C.$$

*Answer(s) submitted:*

- 

(incorrect)