MAT 152

Name: _____ **Section:**

This quiz has 4 questions of equal value. 2 points will be given for a correct answer, 1 for mostly correct work (if shown), 0 otherwise.

1. Find the derivative:

$$\frac{d}{dx} \int_0^x e^{t^2} dt = \rule{3cm}{0.4pt}$$

2. Evaluate:

$$\int_1^4 e^x \cos(e^x) dx = \rule{3cm}{0.4pt}$$

3. Find the indefinite integral:

$$\int \frac{x}{\sqrt{x-1}} dx = \rule{3cm}{0.4pt}$$

4. Find the antiderivative $F(x)$ of $f(x) = 6x^2 + 4x + 1$ which satisfies $F(1) = 10$.

Answer: _____

1