

YOUR NAME: _____

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Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Compute the following indefinite integrals:

(a) $\int (5\sqrt{x} - 3)dx =$

(b) $\int \frac{6x^3 + 8x^2 - 3x + 1}{x} dx =$

(c) $\int 15e^{-3x} dx =$

2. A certain company's marginal cost function is $\text{MC}(x) = \frac{1}{\sqrt{x}} + 4$ dollars, where x is the number of units produced. Find the total cost for the first 400 units produced.