

| |
|---------------------------|
| Name: |
| J#: |
| Date: 2017 June 06 |

Exercise Type (Cost):

In-Class (1AP)

| | |
|--|--------------------|
| Standard: This student is able to... C01: LogExpDerInt. Find derivatives and integrals involving logarithmic and exponential functions. 3/4 | Mark: <hr/> |
| ★ reattempt due on: | |

Prove that $\int (2ye^{y^2} + \frac{4}{y}) dy = e^{y^2} + 4 \ln |3y| + C$.

| |
|---------------------------|
| Name: |
| J#: |
| Date: 2017 June 06 |

Exercise Type (Cost):

In-Class (1AP)

| | |
|---|---------------------|
| Standard: This student is able to... | Mark: |
| S01: LogExpPrf. Derive properties of the logarithmic and exponential functions from their definitions. | |
| 2/3 | ★ reattempt due on: |

Use the definitions $\log_b x = \frac{\ln x}{\ln b}$ and $b^x = \exp(x \ln b)$ to prove the property $x = \log_b(b^x)$.
 (That is, prove that $\log_b x$ and b^x are inverse functions.)

| |
|---------------------------|
| Name: |
| J#: |
| Date: 2017 June 06 |

Exercise Type (Cost):

In-Class (1AP)

| | |
|--|---------------------|
| Standard: This student is able to... | Mark: |
| C02: HypDerInt. Find derivatives and integrals involving hypberbolic functions. | |
| 1/3 | ★ reattempt due on: |

a) Find $\frac{d}{dx}[\cosh(3x^2 + 7)]$.

b) Find $\int (5 \operatorname{sech}^2(x) - 4 \operatorname{csch}(x) \coth(x)) dx$.