

Multiple Choice

Question: Use the product rule to find the derivative of $x^2 e^x$

- a) $2xe^x + x^2 e^x$
- b) $2xe^x$
- c) $2xe^x + x^2 e^{x-1}$
- d) $2xe^x x^2 e^x$

Multiple Choice

Question: Use the product rule to find the derivative of $(\ln x)(e^x)$

- a) $(1/x)e^x + (\ln x)(e^x)$
- b) $(1/x)e^x$
- c) $(1/x)e^x + (\ln x)(e^{x-1})$
- d) $1/x$

Multiple Choice

Question: If the Cost is $C(x) = 1/(200 - x)$, what is the marginal cost?

- a) $-1/(200 - x)^2$
- b) $-(200 - x)^2$
- c) $1/(200 - x)^2$
- d) $-2/(200 - x)^2$

Multiple Choice

Question: Use the quotient rule to find the derivative of $1/(\ln x)$.

- a) $\frac{-1}{x(\ln x)^2}$
- b) $1/x$
- c) $1/(\ln x)^{-2}$
- d) $\frac{1}{x(\ln x)^2}$

Multiple Choice

Question: What is the marginal revenue, if the Revenue is $R(x) = (x^4 + 3x^2)(\ln x)$.

- a) $4x^3 + 6x$
- b) $(4x^3 + 6x)(1/x)$
- c) $(4x^3 + 6x)(\ln x) + (x^4 + 3x^2)/x$
- d) $(4x^3 + 6x)(\ln x^{-1})$