



MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Find the derivative of y with respect to x , t , or θ , as appropriate.

1) $y = \ln 6x$

A) $\frac{1}{6x}$

B) $-\frac{1}{6x}$

C) $-\frac{1}{x}$

D) $\frac{1}{x}$

2) $y = \ln(x - 2)$

A) $\frac{1}{x+2}$

B) $-\frac{1}{x+2}$

C) $\frac{1}{2-x}$

D) $\frac{1}{x-2}$

3) $y = \ln 8x^2$

A) $\frac{2x}{x^2+8}$

B) $\frac{2}{x}$

C) $\frac{16}{x}$

D) $\frac{1}{2x+8}$

4) $y = \frac{\ln x}{x^5}$

A) $\frac{1+5\ln x}{x^{10}}$

B) $\frac{1-5\ln x}{x^6}$

C) $\frac{1-5\ln x}{x^{10}}$

D) $\frac{5\ln x - 1}{x^6}$

5) $y = x^6 \ln x - \frac{1}{3}x^3$

A) $x^5 - x^2 + 6x^5 \ln x$

C) $6x^5 - x^2$

B) $x^6 \ln x - x^2 + 6x^5$

D) $7x^5 - x^2$

6) $y = \ln(\ln 2x)$

A) $\frac{1}{2x}$

B) $\frac{1}{\ln 2x}$

C) $\frac{1}{x}$

D) $\frac{1}{x \ln 2x}$