

QUIZ 8 (1.4) Logs SOLUTIONS

1. $5 \cdot \log(10^R) - 3 \cdot \ln(e^P)$
 $5R - 3P$

2. $\ln(1/e) - \ln(e^{10})$
 $\ln(e^{-1}) - \ln(e^{10})$
 $-1 - 10 = -11$

3. $\log_2 128 = x$
 $2^x = 128$
 $x = 7$

4. $e^{4 \ln 3}$
 $e^{\ln(3^4)}$
 $e^{\ln(81)} = 81$

5. $\log(100^{-4})$
 $\log[(10^2)^{-4}]$
 $\log(10^{-8}) = -8$

QUIZ 8 (1.4) Logs SOLUTIONS

1. $\ln(1/e) + \ln(e^{10})$
 $\ln(e^{-1}) + \ln(e^{10})$
 $-1 + 10 = 9$

2. $2 \cdot \ln(e^P) + 3 \cdot \log(10^R)$
 $2P + 3R$

3. $e^{5 \ln 2}$
 $e^{\ln(2^5)}$
 $e^{\ln(32)} = 32$

4. $\log_2 256 = x$
 $2^x = 256$
 $x = 8$

5. $\log(100^{-3})$
 $\log[(10^2)^{-3}]$
 $\log(10^{-6}) = -6$