

1/23/13 Cumulative Review

Solve for x:

① $\log_{16}(x) = \frac{3}{2}$

② $\log_2(x) = 5$

③ $\log_{36}(x) = -\frac{1}{2}$

Simplify each logarithm

④ $\log_6(6)$

⑤ $\log_8(4)$

⑥ $\log_4(\sqrt{2})$

⑦ $\log_{81}(1)$

Solve:

⑧ $25^{3x} = 5^{x+3}$

⑨ $4^{3x-1} = 8$

⑩ $16^x = 2^{5x+1}$

Simplify

⑪ $16^{3/4}$

⑫ $25^{-3/2}$

⑬ $49^{-1/2}$