6. $\log_4 16 = \log_4 4^2 = 2$

7. $\log_5 \frac{1}{25} = \log_5 5^{-2} = -2$

8. $\log_{25} 5 = \log_{5^2} 5 = 1/2$

9. $\log_3 \sqrt{27} = \log_3 3^{3/2} = 3/2$

10. $\log_2 12 - \log_2 3 = \log_2 4 = 2$

11. $\log_6 12 + \log_6 3 = \log_6 36 = \log_6 6^2 = 2$

12. $e^{\ln 5} = 5$ $(a^{\log_a 8} = 8)$

13. $\dfrac{\log_2 225}{\log_2 15} = \log_{15} 225 = \log_{15} 15^2 = 2$

14. $\log_4 32 + \log_{0,1} 10 = \log_{2^2} 2^5 + \log_{10^{-1}} 10 = \frac{5}{2} - 1 = 1\frac{1}{2}$

15. $9^{\log_3 \sqrt{5}} = (3^2)^{\log_3 5^{\frac{1}{2}}} = 3^{\log_3 5} = 5$