4) zagarine 6) log4 16 = 2

4). log- 1 = -2

(8) $\log_{25} 5 = \frac{1}{2}$ (25=52)

9. $\log_3 \sqrt{24} = \log_3 3^{\frac{2}{3}} = \frac{3}{2}$

(10) $\log_2 12 - \log_2 3 = \log_2 \frac{12}{3} = 2$

(11) logo 12 + logo 3 = logo (12.3) 2 logo 36 = 2

(12). Eln5 = 5

 $\frac{\log_2 225}{\log_2 15} = \frac{\log_2 (25.9)}{\log_2 (3.5)} = \frac{\log_2 (3.5)^2}{\log_2 (3.5)} = 2$

(14) logy 32 + logo,, 10 = logg 25 + logo,, (0,1)-1 = = log4 (16-2) + logo;1(0,1)= logy 16 + logy 2 - 1 = $=2+\frac{1}{2}-1=\frac{1.5}{2}$

 $(15) 9^{\log_3 \sqrt{5}} = 3^{2 \cdot \log_3 \sqrt{5}} = 3^{\log_3 (\sqrt{5})^2} = 3^{\log_3 5} = 5$