

1.45
2

$$\log_a p + \log_b p = \frac{1}{\log_p a} + \frac{1}{\log_p b} = \frac{\log_p b + \log_p a}{\log_p a \cdot \log_p b} =$$

$$\frac{1}{\log_p a \cdot \log_p b} (\log_p b + \log_p a) = \log_a p \cdot \log_b p (\log_p ab) =$$

$$= \frac{\log_a p \cdot \log_b p}{\log_{ab} p}$$