

503. Izračunati:

$$\begin{aligned} \text{a)} \quad & 36^{\log_6 5} + 10^{1-\log 2} - 3^{\log_9 36} = \\ & 6^{2\log_6 5} + \frac{10}{10^{\log 2}} - 3^{\log_{3^2} 6^2} = \\ & 6^{\log_6 5^2} + \frac{10}{10^{\log 2}} - 3^{\log_3 6} = \\ & 6^{\log_6 25} + \frac{10}{2} - 3^{\log_3 6} = \\ & 25 + 5 - 6 = 24 \end{aligned}$$

$$a^{\log_a b} = b, \text{ za } a > 0, a \neq 1, a \neq 1$$

$$\begin{aligned} \text{d)} \quad & 36^{1-\log_6 3} + 25^{-\log_5 6} = \\ & \frac{36}{36^{\log_6 3}} + \frac{1}{25^{\log_5 6}} = \\ & \frac{36}{6^{2\log_6 3}} + \frac{1}{5^{2\log_5 6}} = \\ & \frac{36}{6^{2\log_6 3}} + \frac{1}{5^{2\log_5 6}} = \\ & \frac{36}{6^{\log_6 3^2}} + \frac{1}{5^{\log_5 6^2}} = \\ & \frac{36}{6^{\log_6 3^2}} + \frac{1}{5^{\log_5 6^2}} = \\ & \frac{36}{6^{\log_6 9}} + \frac{1}{5^{\log_5 36}} = \\ & \frac{36}{9} + \frac{1}{36} = 4\frac{1}{36} = \frac{145}{36} \end{aligned}$$

$$a^{\log_a b} = b, \text{ za } a > 0, a \neq 1, a \neq 1$$