ZAD 4

$$\overset{a_1}{\log_3 2} \; ; \; \overset{a_2}{\log_3(\sqrt{3}-1)} \; ; \; \overset{a_3}{\log_3(2-\sqrt{3})}$$

$$a_2 - a_1 = a_3 - a_2$$

$$\log_3(\sqrt{3}-1) - \log_3 2 = \log_3(2-\sqrt{3}) - \log_3(\sqrt{3}-1)$$

$$\log_3\left(\frac{\sqrt{3}-1}{2}\right) = \log_3\left(\frac{2-\sqrt{3}}{\sqrt{3}-1}\right)$$ – USUWAM NIEWYMIERNOŚĆ

$$\frac{2-\sqrt{3}}{\sqrt{3}-1} \cdot \frac{\sqrt{3}+1}{\sqrt{3}+1} = \frac{2\sqrt{3}+2-3-\sqrt{3}}{3+\sqrt{3}-\sqrt{3}-1} = \frac{\sqrt{3}-1}{2}$$

TAK SĄ CIĄGIEM ARYTMETYCZNYM

$$\log_3\left(\frac{\sqrt{3}-1}{2}\right) = \log_3\left(\frac{\sqrt{3}-1}{2}\right)$$