

T: Działania na liczbach niewymiernych.

$$(3 - 2\sqrt{3})(3 + 2\sqrt{3}) = 9 + \cancel{6\sqrt{3}} - \cancel{6\sqrt{3}} - 12 = 9 - 12 = -3$$

$$\frac{2}{\sqrt{3}} \rightarrow \frac{\sqrt{3}}{\sqrt{3}} = \frac{2\sqrt{3}}{3}$$

$$\frac{3\sqrt{3}}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{3\sqrt{6}}{2}$$

$$\frac{\sqrt{5}}{\sqrt{7}} \cdot \frac{\sqrt{7}}{\sqrt{7}} = \frac{\sqrt{35}}{7}$$

$$\frac{3\sqrt{3}}{2\sqrt{11}} \cdot \frac{\sqrt{11}}{\sqrt{11}} = \frac{3\sqrt{33}}{22}$$

$$\frac{3\sqrt{2}}{5\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{3\sqrt{6}}{15}$$

$$\frac{2\sqrt{7}}{3\sqrt{13}} \cdot \frac{\sqrt{13}}{\sqrt{13}} = \frac{2\sqrt{7 \cdot 13}}{3 \cdot 13} = \frac{2\sqrt{91}}{39}$$

$$\frac{\sqrt{11}}{3\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}} = \frac{\sqrt{55}}{3 \cdot \sqrt{5 \cdot 5}} = \frac{\sqrt{55}}{\underbrace{3 \cdot 5}_{15}}$$

$$\frac{3}{\sqrt{21}} \cdot \frac{\sqrt{21}}{\sqrt{21}} = \frac{\cancel{3}\sqrt{21}}{\cancel{21}} = \frac{\sqrt{21}}{7}$$

$$\frac{3(\sqrt{2}-1)}{(\sqrt{2}+1)(\sqrt{2}-1)} = \frac{3\sqrt{2}-3}{2-\cancel{\sqrt{2}}+\cancel{\sqrt{2}}-1}$$

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

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

$$\frac{2\sqrt{3}+2}{2}$$

Zadane dane

$$\frac{3}{\sqrt{2}}$$

$$\frac{3\sqrt{2}}{\sqrt{7}}$$

$$\frac{\sqrt{7}}{3\sqrt{2}}$$

$$\frac{2}{\sqrt{5}-1}$$

$$\frac{4}{2\sqrt{3}+1}$$