

Laboratorio di matematica

Esercitazioni proposte – Derive

Radici e potenze con esponente frazionario

Utilizza *Derive* per semplificare le seguenti espressioni.

$$1 \quad \frac{1}{2\sqrt{2}} \left(\frac{\sqrt{6} + \sqrt{2}}{\sqrt{3} + 1} - \frac{\sqrt{6}}{\sqrt{3} + 2} \right) \quad [2 - \sqrt{3}]$$

$$2 \quad \sqrt{6 + \sqrt{11}} - \frac{\sqrt{11} + \sqrt{6} + 1}{\sqrt{2}} \quad [-\sqrt{3}]$$

$$3 \quad \frac{(2\sqrt{2} - \sqrt{3})(\sqrt{2} + \sqrt{3}) - (\sqrt{2} + \sqrt{3})^2}{\sqrt[4]{36} - \sqrt{16}} \quad \left[\frac{11 + 4\sqrt{6}}{5} \right]$$

$$4 \quad \frac{\frac{\sqrt{b-5}}{\sqrt{b-5}}}{\sqrt{b+4}} \quad [\sqrt{b+4}]$$

$$5 \quad (b+2)^3 \sqrt[3]{a\sqrt{b+2}} \sqrt{a^3(b+2)} \quad \left[a(b+2) \sqrt[6]{a^5} \sqrt[3]{(b+2)^2} \right]$$

$$6 \quad \frac{\frac{\sqrt{n-3}}{\sqrt[3]{n+3}} \cdot \frac{\sqrt{n+3}}{\sqrt[3]{n-3}}}{\sqrt[6]{(n+3)(n-3)}} \quad [1]$$