



COGNOME _____ NOME _____

1. $\sqrt{\frac{\sqrt{12}-\sqrt{27}+\sqrt{75}}{\sqrt{6}-\sqrt{3}} + \frac{1}{1+\sqrt{2}} - 3\sqrt{2} \cdot \frac{1}{\sqrt{(1-\sqrt{2})^2}}}$ _____ / 4,5

2. $\left(\sqrt{\frac{125}{27}} : \sqrt{\frac{5}{3}} + \frac{\sqrt{45}}{\sqrt{20}} + \frac{\sqrt{18}}{\sqrt{8}}\right) : \sqrt{98}$ _____ / 3

3. $(1 + \sqrt{3} - \sqrt[4]{12})(1 + \sqrt{3} + \sqrt[4]{12}) - \sqrt{6\sqrt{3} - 2\sqrt{23}} \cdot \sqrt{6\sqrt{3} + 2\sqrt{23}}$ _____ / 2,5

4. $\frac{x}{\sqrt{2}} - \frac{x-3}{3\sqrt{2}} - \frac{x}{2} = 0$ _____ / 2,5

5. $\frac{1}{3\sqrt{3}+x} = \frac{6\sqrt{3}}{27-x^2} + \frac{1}{x-3\sqrt{3}}$ _____ / 3,5

6. $\frac{1-\sqrt{2}}{\sqrt{2}-x} = \frac{x^2+\sqrt{2}}{x^2-x\sqrt{2}} + \frac{1-x}{x}$ _____ / 3

7. $\begin{cases} x + y = \sqrt{5} + 3 \\ x - y = \sqrt{5} - 3 \end{cases}$ _____ / 1,5

8. $6 + x\sqrt{2} \leq \sqrt{6}(1 + \sqrt{6})$ _____ / 1

9. $\frac{x\sqrt{2}+1}{\sqrt{2}+1} \geq \frac{3\sqrt{2}+x}{3\sqrt{2}-1}$ _____ / 3,5

10. $\frac{x\sqrt{2}}{1+x} < \frac{1}{1-\sqrt{2}}$ _____ / 3,5

Totale punti 28,5. Sufficienza con punti 15,2.

BUON LAVORO!!!

