

## ESPRESSIONI NELL'INSIEME DEI NUMERI REALI POSITIVI

$$1. \sqrt{\sqrt[3]{2}} \cdot \sqrt[4]{2} =$$

$$2. \sqrt[4]{\sqrt[5]{6}} \cdot \sqrt{\sqrt[5]{4}} : \sqrt[10]{\sqrt{3}} =$$

$$3. \frac{\sqrt[4]{\sqrt[3]{5}}}{\sqrt[3]{\sqrt{5}}} =$$

$$4. \frac{\sqrt{\sqrt[5]{8}}}{\sqrt[5]{\sqrt[3]{2}}} =$$

$$5. \sqrt[6]{5} \cdot \sqrt[4]{\sqrt{10}} \cdot \sqrt[3]{\sqrt{2}} =$$

$$11. \sqrt[3]{a^2 b \sqrt{5a^2}} : \left( \sqrt[3]{a \sqrt{a+b}} \cdot \sqrt{(a+b) \sqrt[3]{a \sqrt{5}}} \right)^2 =$$

$$12. \sqrt{a \sqrt[3]{a \sqrt[3]{a^2}}} \cdot \sqrt[3]{a \sqrt[3]{\frac{1}{a}}} : \sqrt{\frac{1}{a}} =$$

$$13. \sqrt[5]{x \sqrt[7]{x^3}} \cdot \sqrt{x \sqrt[7]{\frac{1}{x^2}}} : \sqrt[7]{x^4 \sqrt{x}} =$$

$$14. \sqrt[3]{\frac{a-b}{b^3} \sqrt{\frac{a+b}{ab}}} : \left( \sqrt[3]{\frac{a+b}{a^3} \sqrt{\frac{a-b}{ab}}} : \sqrt[6]{\frac{a+b}{a-b}} \right) =$$

$$15. \sqrt{2x \sqrt[3]{2x}} \cdot \sqrt{\frac{1}{2x} \sqrt[3]{\frac{1}{2x}}} : \sqrt[4]{x \sqrt[3]{2x}} =$$

$$16. \sqrt{2a \sqrt[5]{2a}} \cdot \sqrt[3]{2b \sqrt{2b}} : \left( \sqrt[5]{\sqrt{2^3 a^2 b}} \cdot \sqrt[3]{2ab \sqrt[5]{ab}} \right) =$$

$$17. \sqrt[3]{(a+b)^2 \sqrt{(a+b)^3 \sqrt{a+b}}} \cdot \sqrt{(a+b) \sqrt{a+b}} =$$

$$18. \left( \sqrt[3]{2 \sqrt[3]{2 \sqrt{\frac{1}{2}}}} \cdot \sqrt[3]{\frac{1}{2} \sqrt[3]{2 \sqrt[3]{\frac{1}{4}}}} \right)^6 \cdot \sqrt[3]{2^2 \sqrt{2}} =$$

$$19. \sqrt[3]{a \sqrt{a} \sqrt[4]{a^3}} \cdot \sqrt[3]{a \sqrt{\frac{1}{a}} \sqrt{a}} : \sqrt{a} =$$

$$20. \left[ \left( \sqrt{a \sqrt[3]{\frac{1}{a}}} \right)^3 : \left( \sqrt[6]{a^3 \sqrt{a}} \right)^3 + 2a \sqrt[4]{a^{-7}} \right]^2 \cdot \frac{a \sqrt{a}}{9} =$$

$$21. \sqrt[3]{(a^2 + b) \sqrt{a^2 + b}} \cdot \sqrt[3]{a^2 \sqrt[5]{a^4}} : \sqrt{a^2 + b} =$$

$$6. \frac{\sqrt[5]{\sqrt[3]{3}} \cdot \sqrt[3]{\sqrt{2}}}{\sqrt[6]{\sqrt[5]{6}}} =$$

$$7. \sqrt[5]{x^2 \sqrt[7]{x}} \cdot \sqrt[7]{x^3 \sqrt{x}} : (4\sqrt{x})^2 =$$

$$8. \sqrt{\frac{1}{2} \sqrt{2}} \cdot \sqrt{\frac{1}{2} \sqrt[3]{4}} \cdot \sqrt[3]{\sqrt{2 + \frac{1}{2}}} =$$

$$9. \sqrt{a \sqrt{a}} \cdot \sqrt[3]{a \sqrt{a}} =$$

$$10. \sqrt[4]{3x^2 y \sqrt{2xy} \sqrt[3]{2xy^3}} : \sqrt[12]{108} =$$