

Exemples (suite)

$$1) \sqrt[3]{27^2} = \left(\sqrt[3]{27}\right)^2 = 3^2 = 9$$

$$2) \sqrt[6]{a^2} \sqrt[6]{a^4} = \sqrt[6]{a^2 \cdot a^4} = \sqrt[6]{a^6} = a$$

$$3) \sqrt[6]{\sqrt[4]{(a^4)^3}} \stackrel{\text{prop. 4.}}{=} \sqrt[12]{a^{12}} = a$$

$$4) \sqrt{16a^4} = 4\sqrt{a^4} \stackrel{\text{prop. 5.}}{=} 4a^2$$

$$5) \sqrt[3]{a} \sqrt[4]{b} = \sqrt[12]{a^4} \sqrt[12]{b^3} = \sqrt[12]{a^4 b^3}$$

$$6) \sqrt[3]{a^4} = \sqrt[3]{a^3 \cdot a} = a \sqrt[3]{a}$$

$$7) \sqrt[3]{\underbrace{81}_{27 \cdot 3}} + \sqrt[3]{3} = \sqrt[3]{3} + \sqrt[3]{3} = 2\sqrt[3]{3}$$

ex 4.1.10 \rightarrow f) et 4.1.11