

1.9

$$1) \left((\sqrt[n]{a})^p \right)^n = (\sqrt[n]{a})^{np} = \left((\sqrt[n]{a})^n \right)^p = a^p = (\sqrt[n]{a^p})^n$$

$$2) (\sqrt[n]{a} \sqrt[n]{b})^n = (\sqrt[n]{a})^n (\sqrt[n]{b})^n = a b = (\sqrt[n]{a b})^n$$

$$3) \left(\frac{\sqrt[n]{a}}{\sqrt[n]{b}} \right)^n = \frac{(\sqrt[n]{a})^n}{(\sqrt[n]{b})^n} = \frac{a}{b} = \left(\sqrt[n]{\frac{a}{b}} \right)^n$$