

1.1 à 1.7 La plus petite de chaque

$$2^{-n} = \frac{1}{2^n}$$

$$5^{-3} = \frac{1}{5^3} = \frac{1}{125}$$

$$\begin{array}{l} 2^3 \\ 2^2 \\ 2^1 \\ 2^0 \end{array} \downarrow \div 2 \quad \begin{array}{l} \\ \\ 1 \\ 1 \end{array}$$

$$2^{-n} = \frac{1}{2^n}$$

$$4^3$$

$$4^2$$

$$4^1$$

$$4^0$$

$$4^{-1}$$

$$4^{-2}$$

$$64$$

$$16$$

$$4$$

$$1$$

$$\frac{1}{4^1}$$

$$\frac{1}{16}$$

$$\downarrow \div 4$$

$$\downarrow \div 4$$

$$\downarrow \div 4$$

$$\downarrow \div 4$$

$$\downarrow \div 4$$

$$\frac{1}{4^2}$$

$$4^{-2} = \frac{1}{4^2}$$

$$2^m \cdot 2^{-2} = 2^{m-2} = 2^9$$

$$4^5 = 4 \cdot 4 \cdot 4 \cdot 4 \cdot 4$$

$$3^{-4} = \frac{1}{3 \cdot 3 \cdot 3 \cdot 3}$$

$$3,123 \overset{\textcircled{1}}{=} 3,123$$

$$3,123 \overset{1,4142}{=} 5,00522$$

$$3,123 \overset{\textcircled{2}}{=} 9,753129$$

$3^\pi$

$$3^{1.5} = 3^{\frac{3}{2}} = \sqrt[2]{3^3}$$

The image shows a handwritten mathematical derivation. It starts with the expression  $3^{1.5}$ , followed by an equals sign, then  $3^{\frac{3}{2}}$ . The number 3 in the fraction is circled in red. This is followed by another equals sign and a square root symbol with a 2 above it, containing  $3^3$ . A red arrow points from the circled 3 to the 3 inside the radical. Below this, there is a second equals sign followed by another square root symbol with a 2 above it, which is empty.

$$\sqrt[9]{5} = x$$

$$\underbrace{x \cdot x \cdot x \cdot x \cdot x \cdot x \cdot x \cdot x \cdot x}_{9 \text{ fois}} = 5$$

9 fois

$$2^{\frac{P}{9}} = \sqrt[9]{2^P}$$

1.8 Calculer des racines avec le calculateur



2024 100

2025 101

2026 102,01 ↓

$$101 \cdot \frac{1}{100} = 1,01$$

100. —