

$$1) \sqrt{0.2} \sqrt{3.2} = (0.2)^{1/2} (3.2)^{1/2} = (0.2 \cdot 3.2)^{1/2}$$

dos potencias
con la misma exponente

$$a^{1/n} = \sqrt[n]{a}$$

$$\sqrt{a} \sqrt{b} = \sqrt{ab}$$

forma exponencial / forma radical

$$= \sqrt{(0.2)(3.2)}$$

$$= \sqrt{0.64} = 0.8 \quad ?$$

$$\sqrt{a} = a^{1/2}$$

como saber?

$$a^n a^m = a^{n+m}$$

$$a^n b^n = (ab)^n$$

$$(a^b)^c = a^{bc}$$

$$= (2 \cdot 32 \cdot 10^{-1} \cdot 10^{-1})^{1/2}$$

$$2^4 3^4 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 \cdot 3 \\ = (2 \cdot 3)(2 \cdot 3)(2 \cdot 3)(2 \cdot 3)$$

$$= (64 \cdot 10^{-2})^{1/2} = 64^{1/2} \cdot (10^{-2})^{1/2} =$$

$$= \sqrt{64} \cdot 10^{-2 \cdot \frac{1}{2}} = 8 \cdot 10^{-1} = 8 \cdot \frac{1}{10} = 0.8$$

$$\sqrt{0.2} \sqrt{0.8} = \sqrt{0.2 \cdot 0.8} = \sqrt{0.16} = 0.4$$

$$\tilde{n}) \frac{x^2 y^{-13/2} 8\sqrt{4^4}}{x^3 y^{3/2}} =$$

Receso: 5:00 - 5:15

Convivio - Caminata, este

Sábado medicinal en la

Sierra Santa-Rosa ¿Quién viene?

$$n)^* 0.123123123123\dots = \frac{a}{b} = ?$$

||

x

$$1000x = 123.123123\dots$$

$$= 123 + 0.123123\dots$$

$$= 123 + x$$

$$\Rightarrow \boxed{1000x = 123 + x} \quad / -x$$

Resolver! $999x = 123 \quad / \div 999$

$$x = \frac{\overset{41}{\cancel{123}}}{\underset{333}{\cancel{999}}} = \frac{41}{333} = 0.123123\dots$$

$$16.1480545454\dots$$

$$c) (\sqrt{7.35})^2 = (7.35^{1/2})^2 = 7.35^{1/2 \cdot 2} = 7.35$$

$$\sqrt{3} = 3^{1/2}$$

radical Exponential

$$d) \sqrt{7.35^2} = (7.35^2)^{1/2} = 7.35^{2 \cdot \frac{1}{2}} = 7.35$$

$$a^{1/n} = \sqrt[n]{a}$$

$$(a^m)^n = a^{mn}$$

$$\sqrt{(-3)^2} = +3$$

$$(\sqrt{-3})^2 = ?$$

?

nisiqilwa tiame sentido.

$$3^{2/3} = \sqrt[3]{3^{2 \cdot \frac{1}{3}}} = (3^2)^{1/3} = \sqrt[3]{9}$$
$$3^{2/3} = \sqrt[3]{3^{1/3 \cdot 2}} = (\sqrt[3]{3})^2$$

$$8^{-2/3} = \frac{1}{8^{2/3}} = \frac{1}{(\sqrt[3]{8})^2} =$$
$$= \frac{1}{2^2} = \frac{1}{4}$$

$$\frac{2}{3} = 2 \cdot \frac{1}{3} = \frac{1}{3} \cdot 2$$

$$3^{1/3} = \sqrt[3]{3} \quad \leftarrow$$

"la cúbica raíz de 3"

$$a^{1/n} = \sqrt[n]{a}$$

$$(a^m)^n = a^{m \cdot n}$$

$$a^{m/n} = \sqrt[n]{a^m}$$

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

$$\tilde{n})^* \frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \dots + \frac{1}{1024} = S \quad (\text{por "suma"})$$

$$S = \left(\frac{1}{2}\right) + \cancel{\frac{1}{2^2}} + \cancel{\frac{1}{2^3}} + \cancel{\frac{1}{2^4}} + \dots + \cancel{\frac{1}{2^{10}}}$$

$$\frac{1}{2} S = \cancel{\frac{1}{2^2}} + \cancel{\frac{1}{2^3}} + \dots + \cancel{\frac{1}{2^{10}}} + \left(\frac{1}{2^{11}}\right)$$

$$S - \frac{1}{2} S = \frac{1}{2} - \frac{1}{2^{11}} = \frac{1}{2} \left(1 - \frac{1}{2^{10}}\right)$$

$$\frac{S}{2} = \frac{1}{2} \left(1 - \frac{1}{2^{10}}\right) \quad / \cdot 2$$

$$S = 1 - \frac{1}{2^{10}} = \frac{2^{10} - 1}{2^{10}} = \frac{1023}{1024}$$

"Suma de ~~la~~ serie geométrica"