Decimales

II.d.1.1. a) $15/20 = 0,75$

Racionales

II.d.1.2 a) $1,\overline{222}$

$x = 1,\overline{222}$

$1000.x = 1,\overline{222} \cdot 1000$

$1000x = 1222,\overline{222}$

$x = 1,\overline{222}$

$999.x = 1221$

$x = \frac{1221}{999}$

11 a 13 c) $\frac{\left(0,5\overline{4} + \frac{3}{5}\right)^2}{0,10\overline{8}}$

$x = 0,5\overline{4}$

$10x = 5,\overline{4}$

$100x = 54,\overline{4}$

$100x = 54,\overline{4}$

$10x = 5,\overline{4}$

$90x = 49$

$x = \frac{49}{90}$

$\frac{\left(\frac{49}{90} + \frac{3}{5}\right)^2}{\frac{49}{450}}$

$\frac{(49 + 3.18)^2}{\frac{90}{\frac{49}{450}}}$

$\frac{(49+54)^2}{\frac{90}{\frac{49}{450}}}$

$x = 0,10\overline{8}$

$100x = 10,\overline{8}$

$1000x = 108,\overline{8}$

$1000x = 108,\overline{8}$

$100x = 10,\overline{8}$

$900x = 98$

$x = \frac{98}{900} = \frac{49}{450}$

$\left(\frac{103}{90}\right)^2 \cdot \frac{450}{49} = \frac{103.103.450}{90.90.49} = \frac{10609}{882}$

d) $\sqrt{\frac{0,\overline{8}}{(0,00\overline{7})^3}}$

$x = 0,\overline{8}$

$10x = 0,\overline{8}.10$

$10x = 8,\overline{8}$

$x = 0,\overline{8}$

$9x = 8$

$x = \frac{8}{9}$

$\sqrt{\frac{\frac{8}{9}}{\left(\frac{7}{900}\right)^3}}$

$x = 0,00\overline{7}$

$100x = 0,\overline{7}$

$1000x = 7,\overline{7}$

$1000x = 7,\overline{7}$

$100x = 0,\overline{7}$

$900x = 7$

$x = \frac{7}{900}$

$\sqrt{\frac{8}{3^2 \cdot \left(\frac{7}{900}\right)^3}}$

$\sqrt{\frac{8}{3^2 \cdot \frac{7^3}{30^6}}}$

$$\sqrt{\frac{8}{\frac{3^2 \cdot 7^3}{10^6 \cdot 3^6}}}$$

$$\sqrt{\frac{\frac{8}{7^3}}{10^6 \cdot 3^4}}$$

$$\sqrt{\frac{8 \cdot 10^6 \cdot 3^4}{7^3}}$$

$$\sqrt{\frac{648 \cdot 10^6}{343}}$$

$$\frac{\sqrt{18 \cdot 10^3 \sqrt{2}}}{7\sqrt{7}}$$

$$\frac{18 \cdot 1000\sqrt{2}}{7\sqrt{7}} \cdot \frac{\sqrt{7}}{\sqrt{7}}$$

$$\frac{18000\sqrt{2}\sqrt{7}}{7\sqrt{7}\sqrt{7}}$$

$$\frac{18000\sqrt{14}}{7 \cdot 7}$$

$$\frac{18000\sqrt{14}}{49}$$

11 a 1. 4.

(c) $-\frac{3}{4} \cdot \left[\frac{4}{3}\left(\frac{1}{2} \cdot \frac{1}{3}\right)^{3-2} + \frac{2}{7}\right]$

$-\frac{3}{4} \cdot \left[\frac{4}{3}\left(\frac{1}{6}\right) + \frac{2}{7}\right]$

$-\frac{3}{4} \cdot \left[\frac{4 \cdot 2}{18\ 9} + \frac{2}{7}\right]$

$-\frac{3}{4} \cdot \left[\frac{2}{9}^{14+18} + \frac{2}{7}\right]$

$-\frac{3}{4} \cdot \frac{3 \times 8}{63\ 21} = -\frac{8}{21}$

⑨ $8 - \dfrac{\frac{2}{5} - \frac{1}{9}}{\frac{7}{6}} + \dfrac{1}{21}\left(\dfrac{9}{4} \times \dfrac{-2}{5}\right)$

$8 - \dfrac{\frac{13}{45}}{\frac{7}{6}} + \dfrac{1}{21} \times \dfrac{37}{20}$

$8 - \dfrac{13}{45} : \dfrac{7}{6} + \dfrac{37}{420}$

$8 - \dfrac{13.6}{45.7} + \dfrac{37}{420}$

$\dfrac{78}{315}$ 3

$8 - \dfrac{26}{105} + \dfrac{37}{420}$

$8 - \dfrac{26.4}{105.4} + \dfrac{37}{420}$

$8 - \dfrac{104}{420} + \dfrac{37}{420}$

$8 - \dfrac{67}{420}$

$\dfrac{8.420}{420}$

$\dfrac{3360}{420} - \dfrac{67}{420} = \dfrac{3360 - 67}{420} = \dfrac{3293}{420}$

calculos extra

$\frac{2}{5} = \frac{2.9}{5.9} = \frac{18}{45}$

$\frac{1}{9} = \frac{1.5}{9.5} = \frac{5}{45}$

$\frac{2}{5} - \frac{1}{9} = \frac{18}{45} - \frac{5}{45} = \frac{18-5}{45} =$

$\rightarrow \frac{13}{45}$

$\left(\frac{9}{4} - \frac{2}{5}\right)$

$\frac{9.5 - 2.4}{4.5}$

$\frac{45 - 8}{20}$

$\frac{37}{20}$

105	420	5
21	84	3
7	28	7
1	4	4
1	1	

8

mcm = 420