

## Guia 2

### II.d.1.1

$$d.) \frac{4}{23} = 0,173913$$

### II.d.1.2

$$b.) 0,341341341$$

$$1000x = 341,341341341...$$

$$1000x - x = 341,341341341... - 0,341341341$$

$$999x = 341$$

$$x = \frac{341}{999}$$

### II.d.1.3

$$1. \frac{(0,1\overline{2} + 0,1\overline{7})^2}{0,00\overline{7}} =$$

$$2. \frac{\left(\frac{11}{90} + \frac{1}{9}\right)^2}{\frac{7}{900}} =$$

$$3. \frac{\left(\frac{7}{30}\right)^2}{\frac{7}{900}} = \frac{\frac{49}{900}}{\frac{7}{900}} =$$

$$5. \frac{\frac{49}{900}}{\frac{1}{900}} = \frac{49}{1} = \boxed{49}$$

II.d.1.3 - c)

$$\begin{aligned}
 & \textcircled{c} \quad (0,5\overline{4} + \frac{3}{5})^2 \\
 & \quad \quad \quad 0,108 \\
 & = \frac{(49/90 + 3/5)^2}{93/900} \Rightarrow \frac{(\frac{49}{90})^2 + 2 \cdot \frac{49}{90} \cdot \frac{3}{5} + (\frac{3}{5})^2}{93/900} \\
 & = \frac{\cancel{49^2} + 2 \cdot 49 \cdot 3 + \cancel{3^2}}{\cancel{93} / 900} \quad \quad \quad \begin{aligned} & \text{Sol} \\ & 0,5\overline{4} = 5/10 = 1/2 \\ & = 49 \\ & = 105/10 \end{aligned} \\
 & = \frac{49^2 + 2 \cdot 49 \cdot 3 + 3^2}{93/900} = \frac{2401 + 49 + 9}{93/100} \\
 & = \frac{10609}{93/900} = \frac{10609}{93} \cdot \frac{900}{100} = \frac{1060900}{9300} \\
 & \quad \quad \quad \boxed{= \frac{10609}{882}} \quad \text{Simplificamos} \\
 & \quad \quad \quad \quad \quad \quad \quad \quad \quad \text{dividido por 900}
 \end{aligned}$$

II. d. 1. 4. e

resolver

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

$$\frac{-3}{4} \cdot \left[ \frac{4}{3} \left( \frac{1}{6} \right) + \frac{2}{7} \right] = \frac{2}{9} + \frac{2}{7} = \frac{14+18}{63} = \frac{32}{63}$$

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

$$\frac{-3}{4} \cdot \left[ \frac{32}{63} \right] = \frac{96}{252} = \frac{8}{21}$$

II. d. 1. 4. f

$$\frac{\frac{11}{27} - \frac{3}{4}}{\frac{11}{29} + \frac{8}{3}} = \frac{14}{3} \cdot \left( 1 - \frac{2}{3} \right) = \left\{ \frac{11}{27} - \frac{3}{4} = \frac{44-81}{108} = \frac{-37}{108} \right.$$

$$\left. \frac{11}{29} + \frac{8}{3} = \frac{33+232}{87} = \frac{265}{87} \right\}$$

$$\frac{-37}{108} - \frac{14}{9} = \frac{265}{87}$$

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

$$\frac{14}{3} \cdot \frac{1}{3} = \frac{14}{9}$$

$$\left( \frac{37}{108} \cdot \frac{87}{265} \right) - \frac{14}{9} =$$

$$\frac{3219}{28620} - \frac{14}{9} =$$

$$\frac{-1073}{9540} - \frac{14}{9} = \frac{+15913}{9540}$$