

$$(44) b.) \frac{-1}{7} \neq \frac{-14}{30} \quad -1 \cdot 30 \neq 7 \cdot -14 \quad \text{No son equivalentes}$$

$$45.a) \frac{10}{4} = \frac{x}{6} \quad // \quad x = \frac{6 \cdot 10}{4} = \underline{\underline{15}}$$

$$46) \frac{2}{3} = \frac{4}{6} = \frac{4}{6} = \frac{20}{30} = \underline{\underline{\frac{30}{45}}}$$

$$50a) \frac{20}{40} = \frac{2 \cdot 2 \cdot 5}{2 \cdot 2 \cdot 2 \cdot 5} = \underline{\underline{\frac{1}{2}}}$$

$$50i) \frac{6}{18} = \frac{2 \cdot 3}{2 \cdot 3 \cdot 3} = \underline{\underline{\frac{1}{3}}}$$

$$56d) 9 + \frac{5}{7} - \frac{6}{7} = \frac{63}{7} + \frac{5}{7} - \frac{6}{7} = \underline{\underline{\frac{62}{7}}}$$

$$58d) 3 - \frac{1}{21} - \frac{1}{7} + \frac{2}{9} = \frac{189}{63} - \frac{3}{63} - \frac{9}{63} + \frac{14}{63} = \underline{\underline{\frac{191}{63}}}$$

$$61c) \frac{3}{7} + \frac{3}{8} + x = \frac{3}{9} \quad // \quad x = \frac{3}{9} - \frac{3}{7} - \frac{3}{8} =$$

$$= \frac{168}{504} - \frac{216}{504} - \frac{189}{504} = \underline{\underline{\frac{-237}{504}}}$$

$$63d) \left(-\frac{1}{4}\right) \cdot \left(-\frac{3}{6}\right) = \frac{3}{24} = \underline{\underline{\frac{1}{8}}}$$

$$65d) \frac{5}{6} : \left(-\frac{10}{3}\right) = -\frac{15}{60} = \underline{\underline{-\frac{1}{4}}}$$

$$66d) \quad \frac{1}{4} : \frac{1}{5} : x = \frac{1}{6} // \quad \frac{1}{4} : \frac{1}{5} = \frac{1}{6} \circ x$$

$$x = \frac{1}{4} : \frac{1}{5} : \frac{1}{6} = \frac{5}{4} : \frac{1}{6} = \frac{30}{4} = \underline{\underline{\frac{15}{2}}}$$

67d) $9 - \frac{1}{4} \cdot \left(\frac{7}{3} + \frac{2}{5} \right) = 9 - \frac{1}{4} \cdot \left(\frac{35}{15} + \frac{6}{15} \right) =$
 $9 - \frac{1}{4} \cdot \frac{41}{15} = 9 - \frac{41}{60} = \frac{540}{60} - \frac{41}{60} = \underline{\underline{\frac{499}{60}}}$

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76a) $\frac{9}{8} = 1'125$ // b) $7'35 = \frac{735}{100} = \frac{147}{20}$ // c) $13'7 = \frac{137-13}{9} = \underline{\underline{\frac{124}{9}}}$

d) $89' = \frac{891-89}{90} = \frac{802}{90} = \frac{401}{45}$ // e) $\frac{48}{10} = \underline{\underline{4'8}}$

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85) Ha vallado $\frac{3}{7} + \frac{2}{5} = \frac{15}{35} + \frac{14}{35} = \frac{29}{35}$ Ha vallado

$1 - \frac{29}{35} = \frac{35}{35} - \frac{29}{35} = \frac{6}{35}$ quedan por vallar.

$2.275 \cdot \frac{6}{35} = \underline{\underline{390m.}} faltan por vallar$

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~~34a)~~ 34c) $\left(-\frac{2}{5}\right) \cdot \left(-\frac{2}{5}\right) \cdot \left(-\frac{2}{5}\right) = \left(-\frac{2}{5}\right)^3 = \underline{\underline{-\frac{8}{125}}}$

38d) $81 = \underline{\underline{3^4}}$ // 39b) $-125 = -5^3$ // 39e) $121 = \underline{\underline{-11^2}}$

40a) $(-2^2) = \underline{\underline{4}}$ // 40c) $-(-8)^2 = \underline{\underline{-64}}$

44f) $\left(\frac{-3}{5}\right)^{-3} = \frac{1}{\left(\frac{-3}{5}\right)^3} = \frac{1}{\frac{-3^3}{5^3}} = -\frac{5^3}{3^3} = \underline{\underline{-\frac{125}{27}}}$

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49a)

$$\underline{\underline{3^6}}$$

//

50a)

$$(7 \cdot 3)^4 = 21^4 = \underline{\underline{194.481}}$$

50c)

$$\left[\frac{4}{3} \cdot -\frac{8}{6} \right]^3 = \left(\frac{4}{3} \right)^3 \cdot \left(-\frac{8}{6} \right)^3 = \left(\frac{4}{3} \cdot -\frac{8}{6} \right)^3 = \left(-\frac{32}{18} \right)$$

$$= -\frac{32.768}{54} = \underline{\underline{5'6186}}$$

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52a) $3^8 : (-3)^4 = \underline{\underline{3^4}}$

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65a) $40^{12} : [(-4)^6]^{-6} = 40^{12} : (-4)^{-36} = 40^{12} : \frac{1}{(-4)^{36}} =$

$$= 40^{12} \cdot (-4)^{36} = 40^{12} \cdot 4^{36} = (4 \cdot 10)^{12} \cdot 4^{36} = 4^{12} \cdot 4^{36} \cdot 10^{12} =$$

$$= \underline{\underline{4^{48} \cdot 10^{12}}} = (2^2)^{48} \cdot 2^{12} \cdot 5^{12} = 2^{96} \cdot 2^{12} \cdot 5^{12} = \underline{\underline{2^{108} \cdot 5^{12}}}$$

66a) $0'000000001 \cdot 1.000.000 = 0'001 = \underline{\underline{1 \cdot 10^{-3}}} = \underline{\underline{10^{-3}}}$

67a) $\underline{\underline{3'5 \cdot 10^{12}}}$ // 68a) $\underline{\underline{34.320}}$ //

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70a) $113'5 \cdot 10^{-6} = 0'0001135$
 $0'0001 \cdot 10^4 = 1$
 $+ \underline{\underline{1'0001135 \cdot 10^0}}$

76 a) b) c)

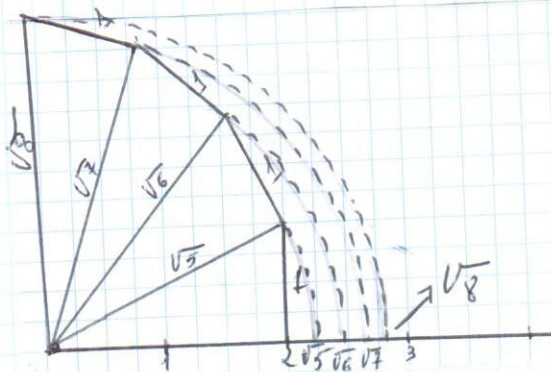
El número más cercano a 6 que se pueda descomponer en un cuadrado + 12 es 5. Por lo tanto partiremos de él

$$\begin{aligned} \textcircled{1} \quad 5^2 &= 2^2 + 12 \\ x^2 &= 2^2 + 12 \\ x^2 &= 5 \\ \boxed{x = \sqrt{5}} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad x^2 &= (\sqrt{5})^2 + 12 \\ x^2 &= 5 + 12 \\ x^2 &= 17 \\ \boxed{x = \sqrt{17}} \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 &= (\sqrt{7})^2 + 12 \\ x^2 &= 7 + 12 \\ x^2 &= 19 \\ \boxed{x = \sqrt{19}} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 &= (\sqrt{6})^2 + 12 \\ x^2 &= 6 + 12 \\ x^2 &= 18 \\ \boxed{x = \sqrt{18}} \end{aligned}$$



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94)

$$5^3$$

=

125

flecha