

Algebra 1

Thursday, September 10, 2020 4:15 PM

Problemas a revisar de la tarea 3:

I (13), (12), (24), (22), 23, 7

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$$13. \frac{3}{4} - \frac{5}{\frac{6}{7}-8} \qquad 13. \frac{3}{4} - \frac{5}{\frac{6}{7}-8}$$

II 32, 31
||| ||

Directo

$$13. \frac{3}{4} - \frac{5}{\frac{6}{7}-8} = \frac{3}{4} - \frac{5}{\frac{6-8 \cdot 7}{7}} = \frac{3}{4} - \frac{5}{\frac{6-56}{7}} = \frac{3}{4} - \frac{5}{\frac{-50}{7}} =$$

$$= \frac{3}{4} + 5 \cdot \frac{7}{50} = \frac{3}{4} + \frac{7}{10} = \frac{30+28}{40} = \frac{58}{40} = \frac{29}{20}$$

↑
tortilla

$$6-8 \cdot 7 =$$

$$6-56 =$$

$$-50$$

$$\frac{5}{\frac{-50}{7}} = 5 \cdot \frac{7}{-50}$$

"trucos"

$$13. \frac{3}{4} - \frac{5}{\frac{6}{7}-8} = \frac{3}{4} - \frac{5 \cdot 7}{(\frac{6}{7}-8) \cdot 7} = \frac{3}{4} - \frac{5 \cdot 7}{\frac{6}{7} \cdot 7 - 8 \cdot 7} =$$

$$= \frac{3}{4} - \frac{5 \cdot 7}{6-56} = \frac{3}{4} - \frac{35}{-50} = \frac{3}{4} + \frac{7}{10} = \dots$$

$$5 \cdot \frac{7}{50} = \frac{5}{1} \cdot \frac{7}{50} =$$

$$= \frac{5 \cdot 7}{50} = \frac{7}{10}$$

$$24. \quad 0.202/0.0202 = \frac{0.202}{0.0202} = \frac{\frac{202}{1000}}{\frac{202}{10000}} = \frac{202}{1000} \cdot \frac{10000}{202} = 10$$

$$= \frac{0.202 \cdot 10000}{0.0202 \cdot 10000} = \frac{2020}{202} = 10$$

$$22. \quad \frac{0.001 - 0.01}{0.1} = \frac{(0.001 - 0.01) \cdot 1000}{0.1 \cdot 1000} = \frac{1 - 10}{100} = \frac{-9}{100} = -\frac{9}{100}$$

$$7. \quad 7 \cdot \frac{-12}{24} = \frac{7}{1} \cdot \frac{(-12)}{24} = \frac{7 \cdot (-12)}{24} = -\frac{7 \cdot \cancel{12}^1}{\cancel{24}_2} = -\frac{7}{2}$$

$$12. \quad \frac{\frac{13}{4} - 5}{\frac{1}{7} - \frac{1}{8}} = \frac{\frac{13}{4} - 5}{\frac{50}{7}} = \frac{\frac{13}{4} \cdot \frac{7}{50}}{\frac{50}{7}} = \frac{119}{200}$$

$$23. \quad 2.02 = \frac{2.02}{1} = \frac{2.02 \cdot 100}{1 \cdot 100} = \frac{\frac{202}{100}}{50} = \frac{202}{50}$$

$$\left. \begin{aligned} \frac{3}{4} - 5 &= \frac{3}{4} - \frac{5 \cdot 4}{4} \\ &= \frac{3 - 20}{4} = -\frac{17}{4} \\ \frac{6}{7} - 8 &= \frac{6}{7} - \frac{8 \cdot 7}{7} \\ &= \frac{6 - 56}{7} = -\frac{50}{7} \end{aligned} \right\}$$

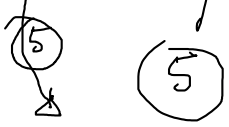
$$\frac{17}{7} = \frac{119}{50}$$

Receso 5:28 - 5:40

31. a) $(\frac{1}{2})^{-1} =$

32. a) $(\frac{3}{4})^{-2} =$

$(\frac{1}{2})^{-1} = \frac{1}{(\frac{1}{2})^1} = \frac{1}{\frac{1}{2}} = 1 \cdot \frac{2}{1} = 2$



$(2^{-1})^{-1} = 2^{(-1)(-1)} = 2^1 = 2$

$a^{-1} = \frac{1}{a}$



Regla de potencia

~~$a^{b+c} = a^b + a^c$~~ ?

1

1

2

3

4

5

6

$a^{b+c} = a^b \cdot a^c$

$a^{b-c} = \frac{a^b}{a^c}$

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

$a^0 = 1 \quad (a \neq 0)$

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

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

$27^{\frac{1}{3}} = 3$

$27^{-\frac{1}{3}} = \frac{1}{27^{\frac{1}{3}}} = \frac{1}{3}$

Notación científica

$10^2 = 100$

$10^1 = 10$

$10^0 = 1$

$10^{-1} = 0.1$

⋮

$10^{-6} = 0.000001 \approx$ milloésima.

10^{-10} metros = 1 átomo, 10^{24} ,