

Bài tập Đại số 7. Nhân chia số hữu tỉ

Bài 1. Tính:

a) $\frac{-7}{8} : \left(-1\frac{2}{5}\right)$; b) $0,15 : \frac{-17}{18}$; c) $\frac{-3}{7} \cdot \frac{12}{-13} \cdot \frac{-14}{15}$; d) $-3 \cdot \frac{-28}{25} \cdot \frac{15}{-14} \cdot \frac{5}{-12}$; e) $\frac{15}{35} : \frac{45}{56} \cdot \left(-\frac{3}{5}\right)$;

f) $\left(-1\frac{1}{2}\right) : \frac{3}{-4} \cdot \left(-4\frac{1}{2}\right)$

Bài 2. Tính:

a) $A = \frac{3}{5} \cdot \frac{6}{7} + \frac{3}{7} : \frac{5}{3} - \frac{2}{7} : 1\frac{2}{3}$; b) $B = \left(-13 \cdot \frac{2}{5} + \frac{-2}{9} : 2\frac{1}{2} + \frac{2}{5} \cdot \frac{11}{9}\right) \cdot 2\frac{1}{2}$; c) $C = \left(\frac{-4}{5} + \frac{5}{7}\right) : \frac{2}{3} + \left(\frac{-1}{5} + \frac{2}{7}\right) : \frac{2}{3}$;

d) $D = \frac{4}{9} : \left(\frac{1}{15} - \frac{2}{3}\right) + \frac{4}{9} : \left(\frac{1}{11} - \frac{5}{22}\right)$; e) $E = \left(\frac{2}{7} \cdot \frac{1}{4} - \frac{1}{3} \cdot \frac{2}{7}\right) : \left(\frac{2}{7} \cdot \frac{3}{9} - \frac{2}{7} \cdot \frac{2}{5}\right)$;

f) $F = \frac{\left(\frac{1}{5} - \frac{2}{7}\right) \cdot \frac{3}{4} - \frac{3}{4} \left(\frac{1}{3} - \frac{2}{7}\right)}{\frac{1}{5} \cdot \frac{2}{7} - \frac{1}{3} \left(\frac{2}{7} + \frac{3}{9}\right) + \frac{3}{9} \cdot \frac{1}{5}}$

Bài 3. Tìm x:

a) $\left(\frac{1}{2} + 1,5\right) \cdot x = \frac{1}{5}$; b) $\left(-1\frac{3}{5} + x\right) : \frac{12}{13} = 2\frac{1}{6}$; c) $\left(x : 2\frac{1}{3}\right) \cdot \frac{1}{7} = \frac{-3}{8}$; d) $\frac{-4}{7}x + \frac{7}{5} = \frac{1}{8} : \left(-1\frac{2}{3}\right)$;

e) $\left(-3x + \frac{1}{5}\right) \left(x - \frac{1}{2}\right) = 0$

Bài 4. Tìm x sao cho:

a) $\left(x - \frac{3}{2}\right) \cdot \frac{1}{2} > 0$; b) $(2-x) \cdot \frac{19}{-22} < 0$; c) $x^2 : \left(x + \frac{1}{2}\right) > 0$; d) $(2x-3) : \left(2x^2 + \frac{1}{3}\right) < 0$;

e) Tìm x nguyên biết $\frac{3}{7} \cdot 15\frac{1}{3} + \frac{3}{7} \cdot 5\frac{2}{3} < x < \left(3\frac{1}{2} : 7 - 6\frac{1}{2}\right) \left(-2\frac{1}{3}\right)$

Luyện tập:

a) $(-3) : \frac{-1}{6}$;

b) $0,5 : \left(-1\frac{1}{2}\right)$;

c) $1\frac{4}{7} : \left(-1\frac{2}{5}\right)$;

d) $1\frac{3}{8} : (-0,15)$.

$$3,5 \cdot \left(-\frac{2}{7}\right);$$

$$\frac{12}{25} \cdot (-38,2) - \frac{12}{25} \cdot 61,8;$$

$$\frac{-23}{45} \cdot \frac{-9}{23} : \frac{7}{26} \cdot \frac{-3}{13};$$

$$A = \frac{\frac{-6}{7} + \frac{6}{13} - \frac{6}{29}}{\frac{9}{7} - \frac{9}{13} + \frac{9}{29}};$$

$$a) \frac{7}{35} : \left(x - \frac{1}{3}\right) = \frac{-2}{25};$$

$$c) \frac{3}{7}x - \frac{2}{3}x = \frac{10}{21};$$

$$a) \frac{-7}{9} \cdot 2\frac{3}{4};$$

$$c) \frac{3}{4} \cdot 15\frac{1}{3} - \frac{3}{4} \cdot 43\frac{1}{3};$$

$$a) 0,375 : (-4,5);$$

$$c) 9\frac{1}{3} : 4\frac{2}{3} - 2;$$

$$A = \left(\frac{-6}{11}\right) \cdot \frac{7}{10} \cdot \left(\frac{11}{-6}\right) \cdot (-20);$$

$$C = \left(\frac{-3}{7}\right) \cdot \frac{5}{11} + \left(-\frac{5}{14}\right) \cdot \frac{5}{11};$$

$$b) -1\frac{1}{2} : 2\frac{2}{3};$$

$$d) -0,75 : \frac{3}{16} \cdot \left(-2\frac{1}{7}\right).$$

$$b) 13\frac{2}{7} : \left(\frac{-8}{9}\right) + 2\frac{5}{7} : \left(\frac{-8}{9}\right).$$

$$B = \frac{\frac{2}{15} - \frac{2}{21} + \frac{2}{39}}{0,25 - \frac{5}{28} + \frac{5}{52}}.$$

$$b) \left(x - \frac{3}{5}\right) : \frac{-1}{3} = \frac{2}{5};$$

$$d) (x - 1)(x + 2) < 0.$$

$$b) \frac{2}{3} + \frac{1}{3} \cdot \frac{-2}{5};$$

$$d) (-49,1) \cdot \frac{13}{27} - 58,9 \cdot \frac{13}{27}.$$

$$b) 3\frac{1}{7} : \left(-1\frac{3}{7}\right);$$

$$d) \left(7\frac{3}{4} : 0,3125 + 4,5 \cdot 2\frac{2}{45}\right) : (-8,5).$$

$$B = \left(-\frac{1}{9}\right) \cdot \left(\frac{-17}{29}\right) \cdot \frac{58}{51};$$

$$D = \left(1\frac{1}{27} \cdot \frac{12}{23} \cdot \frac{9}{14}\right) : \left(-\frac{3}{23}\right).$$

$$P_1 = (-0,25) \cdot \frac{4}{17} \cdot \left(-3\frac{5}{21}\right) \cdot \left(-\frac{7}{23}\right);$$

$$P_2 = \left(-\frac{23}{29}\right) \cdot \left(-\frac{15}{17}\right) \cdot 0,125 \cdot 3\frac{1}{5};$$

$$P_3 = \frac{-5}{13} \cdot \frac{-4}{13} \cdot \frac{-3}{13} \dots \frac{4}{13} \cdot \frac{5}{13}.$$

$$a) \frac{3}{7}x - \frac{2}{5}x = -\frac{17}{35};$$

$$b) \left(\frac{3}{4}x - \frac{9}{16}\right) \left(\frac{1}{3} + \frac{-3}{5} : x\right) = 0.$$

$$M = \frac{-3}{8} \cdot 1\frac{3}{5} + \frac{1}{7} \cdot \left(-1\frac{1}{6}\right);$$

$$N = 2\frac{1}{3} \cdot \left(-3\frac{1}{4}\right) \cdot (-2,5);$$

$$P = \left(\frac{3}{5} - 0,2\right) \cdot \left(0,5 - \frac{4}{5}\right).$$

$$a) x : \left(\frac{1}{9} - \frac{2}{5}\right) = -\frac{1}{2};$$

$$b) \left(\frac{-3}{5} + 1,25\right) \cdot x = \frac{1}{3};$$

$$c) \frac{1}{3}x + \left(\frac{2}{3} - \frac{4}{9}\right) = \frac{-3}{4};$$

$$d) \left(\frac{5}{6} - \frac{3}{4}\right) : \frac{-2x}{3} = \frac{-12}{19}.$$

Tim số nguyên x, biết rằng :

$$\left(-1\frac{1}{2} : \frac{3}{-4}\right) \cdot \left(-4\frac{1}{2}\right) - \frac{1}{4} < \frac{x}{8} < -\frac{1}{2} \cdot \frac{3}{4} : \frac{1}{8} + 1.$$