

Задача №8

(II)

$$\frac{5^2-1}{18} \cdot \frac{10}{4} = \frac{(5.5)-1}{18} \cdot \frac{10}{4} = \frac{24}{18} \cdot \frac{10}{4} = \frac{24 \cdot 10}{18 \cdot 4} = \frac{240}{72} =$$

$$= \frac{240:8}{72:8} = \frac{30}{9} = \frac{30:3}{9:3} = \frac{10}{3}$$

Задача №9

$$\frac{3}{8} \cdot \frac{24}{5} \cdot \frac{10}{27} = \frac{3 \cdot 24 \cdot 10}{8 \cdot 5 \cdot 27} = \frac{720}{1080} = \frac{720:90}{1080:90} = \frac{8}{12} =$$

$$= \frac{8:4}{12:4} = \frac{2}{3}$$

Задача №10

$$\frac{\cancel{3}}{\cancel{5}} \cdot \frac{\cancel{8}}{\cancel{7}} \cdot \frac{\cancel{4}}{9} - \frac{\cancel{2}}{\cancel{4}} \cdot \frac{\cancel{4}}{\cancel{6}} \cdot \frac{\cancel{6}}{8} = \frac{3}{9} - \frac{2}{8} = \frac{(3 \cdot 8) - (2 \cdot 9)}{9 \cdot 8} =$$

$$= \frac{24-18}{72} = \frac{6}{72} = \frac{6:6}{72:6} = \frac{1}{12}$$

(III)

Задача №11

$$\frac{1}{2} \cdot \frac{2}{3} \cdot \frac{3}{4} \cdot \frac{4}{5} \cdot \frac{5}{6} \dots \frac{2011}{2012} = \frac{1}{2012}$$

(Все сокращаем,
остаток записываем)

School Mathematics

24.07.23

(I)

Задача №1

$$\frac{1}{2} + \frac{1}{3} = \frac{(1 \cdot 3) + (1 \cdot 2)}{2 \cdot 3} = \frac{3 + 2}{6} = \frac{5}{6}$$

Задача №2

$$\frac{3}{2} + \frac{1}{2} = \frac{(3 \cdot 2) + (1 \cdot 2)}{2 \cdot 2} = \frac{6 + 2}{4} = \frac{8}{4} = 2$$

Задача №3

$$\frac{3}{8} - \frac{1}{4} = \frac{(3 \cdot 4) - (1 \cdot 8)}{8 \cdot 4} = \frac{12 - 8}{32} = \frac{4}{32} = \frac{1}{8}$$

обычные
денежные

Задача №4

$$\frac{5}{3} \cdot \frac{15}{10} = \frac{5 \cdot 15}{3 \cdot 10} = \frac{75}{30} = \frac{75 : 3}{30 : 3} = \frac{25}{10} = \frac{25 : 5}{10 : 5} = \frac{5}{2}$$

обычные
денежные

Задача №5

$$\frac{1}{2} : \frac{1}{2} = \frac{1 \cdot 2}{1 \cdot 2} = \frac{2}{2} = \frac{2 : 2}{2 : 2} = \frac{1}{1} = 1$$