Задание 1

a) $\frac{1}{3} + \frac{1}{3} =$

$\frac{1}{5} + \frac{1}{5} =$

$\frac{1}{7} + \frac{1}{7} =$

$\frac{1}{9} + \frac{1}{9} =$

$\frac{1}{11} - \frac{1}{11} =$

b) $\frac{1}{5} + \frac{2}{5} =$

$\frac{1}{7} + \frac{3}{7} =$

$\frac{1}{9} + \frac{4}{9} =$

$\frac{10}{11} - \frac{4}{11} =$

$\frac{4}{13} - \frac{1}{13} =$

c) $\frac{2}{7} + \frac{4}{7} =$

$\frac{2}{9} + \frac{5}{9} =$

$\frac{4}{11} + \frac{4}{11} =$

$\frac{12}{13} - \frac{3}{13} =$

$\frac{14}{15} - \frac{7}{15} =$

d) $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$

$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} =$

$\frac{1}{7} + \frac{1}{7} + \frac{1}{7} =$

$\frac{1}{8} + \frac{1}{8} - \frac{1}{8} =$

$\frac{1}{9} - \frac{1}{9} + \frac{1}{9} =$

e) $\frac{1}{8} + \frac{3}{8} + \frac{3}{8} =$

$\frac{3}{10} + \frac{1}{10} + \frac{3}{10} =$

$\frac{3}{14} + \frac{5}{14} + \frac{1}{14} =$

$\frac{3}{16} + \frac{9}{16} - \frac{3}{16} =$

$\frac{17}{18} - \frac{5}{18} - \frac{7}{18} =$

f) $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} =$

$\frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} =$

$\frac{1}{9} + \frac{1}{9} + \frac{1}{9} - \frac{1}{9} =$

$\frac{1}{11} + \frac{1}{11} - \frac{1}{11} + \frac{1}{11} =$

$\frac{1}{13} - \frac{1}{13} + \frac{1}{13} + \frac{1}{13} =$

g) $\frac{1}{15} + \frac{2}{15} + \frac{4}{15} + \frac{7}{15} =$

$\frac{2}{17} + \frac{3}{17} + \frac{4}{17} + \frac{5}{17} =$

$\frac{2}{19} + \frac{4}{19} + \frac{16}{19} - \frac{8}{19} =$

$\frac{17}{21} - \frac{4}{21} + \frac{17}{21} - \frac{16}{21} =$

$\frac{20}{23} + \frac{12}{23} - \frac{9}{23} - \frac{22}{23} =$

Задание 2

a) $\frac{1}{5} + \frac{4}{5} =$

$\frac{5}{6} + \frac{1}{6} =$

$\frac{3}{7} + \frac{4}{7} =$

$\frac{5}{8} + \frac{3}{8} =$

$\frac{4}{9} + \frac{5}{9} =$

b) $\frac{3}{7} + \frac{2}{7} - \frac{5}{7} =$

$\frac{4}{9} + \frac{7}{9} - \frac{2}{9} =$

$\frac{2}{11} + \frac{7}{11} - \frac{9}{11} =$

$\frac{10}{13} + \frac{5}{13} - \frac{2}{13} =$

$\frac{13}{15} - \frac{9}{15} - \frac{4}{15} =$

c) $\frac{1}{7} + \frac{2}{7} + \frac{4}{7} =$

$\frac{5}{9} + \frac{5}{9} + \frac{8}{9} =$

$\frac{10}{11} + \frac{9}{11} + \frac{3}{11} =$

$\frac{5}{13} + \frac{9}{13} + \frac{12}{13} =$

$\frac{14}{15} + \frac{14}{15} + \frac{17}{15} =$

d) $\frac{1}{4} + \frac{1}{4} =$

$\frac{3}{8} + \frac{1}{8} =$

$\frac{7}{12} - \frac{1}{12} =$

$\frac{5}{16} + \frac{3}{16} =$

$\frac{11}{24} - \frac{5}{24} =$

! e) $\frac{7}{15} + \frac{2}{15} - \frac{4}{15} =$

$\frac{15}{16} - \frac{9}{16} - \frac{2}{16} =$

$\frac{13}{20} - \frac{3}{20} - \frac{6}{20} =$

$\frac{5}{24} + \frac{7}{24} - \frac{8}{24} =$

$\frac{15}{28} - \frac{9}{28} + \frac{2}{28} =$

f) $\frac{8}{15} + \frac{4}{15} - \frac{2}{15} =$

$\frac{7}{16} + \frac{9}{16} - \frac{4}{16} =$

$\frac{13}{20} + \frac{7}{20} - \frac{4}{20} =$

$\frac{11}{24} - \frac{4}{24} + \frac{13}{24} =$

$\frac{19}{28} - \frac{3}{28} + \frac{4}{28} =$

Задание 3

a) $\frac{1}{2} + \frac{2}{2} =$

$\frac{2}{3} + \frac{2}{3} =$

$\frac{3}{4} + \frac{2}{4} =$

$\frac{4}{5} + \frac{2}{5} =$

$\frac{11}{7} - \frac{3}{7} =$

b) $\frac{2}{3} + \frac{2}{3} + \frac{1}{3} =$

$\frac{3}{4} + \frac{3}{4} + \frac{1}{4} =$

$\frac{3}{5} + \frac{4}{5} + \frac{2}{5} =$

$\frac{5}{6} + \frac{5}{6} + \frac{1}{6} =$

$\frac{7}{8} + \frac{5}{8} - \frac{1}{8} =$

c) $\frac{3}{2} + \frac{2}{2} =$

$\frac{8}{3} + \frac{2}{3} =$

$\frac{15}{4} + \frac{2}{4} =$

$\frac{28}{5} - \frac{2}{5} =$

$\frac{41}{6} - \frac{4}{6} =$

d) $\frac{5}{3} + \frac{2}{3} + \frac{1}{3} =$

$\frac{3}{4} + \frac{7}{4} + \frac{5}{4} =$

$\frac{13}{5} + \frac{12}{5} - \frac{1}{5} =$

$\frac{23}{6} - \frac{5}{6} + \frac{17}{6} =$

$\frac{22}{7} + \frac{18}{7} + \frac{6}{7} =$

e) $\frac{7}{12} + \frac{9}{12} =$

$\frac{7}{8} + \frac{3}{8} =$

$\frac{17}{20} + \frac{8}{20} =$

$\frac{7}{10} + \frac{5}{10} =$

$\frac{7}{15} + \frac{11}{15} =$

f) $\frac{5}{12} + \frac{11}{12} + \frac{5}{12} =$

$\frac{7}{15} + \frac{7}{15} + \frac{10}{15} =$

$\frac{17}{24} + \frac{23}{24} - \frac{4}{24} =$

$\frac{22}{35} - \frac{4}{35} + \frac{32}{35} =$

$\frac{19}{40} + \frac{23}{40} + \frac{13}{40} =$

Задание 4

a) $\frac{1}{2} = \frac{}{4} = \frac{}{8} = \frac{}{16} = \frac{}{} = \frac{}{} =$

$\frac{1}{3} = \frac{}{6} = \frac{}{12} = \frac{}{24} = \frac{}{} = \frac{}{} =$

$\frac{1}{4} = \frac{}{8} = \frac{}{16} = \frac{}{32} = \frac{}{} = \frac{}{} =$

$\frac{1}{5} = \frac{}{10} = \frac{}{20} = \frac{}{30} = \frac{}{} = \frac{}{} =$

$\frac{1}{6} = \frac{}{12} = \frac{}{18} = \frac{}{24} = \frac{}{} = \frac{}{} =$

b) $\frac{2}{3} = \frac{}{6} = \frac{}{12} = \frac{}{24} = \frac{}{} = \frac{}{} =$

$\frac{3}{4} = \frac{}{8} = \frac{}{16} = \frac{}{32} = \frac{}{} = \frac{}{} =$

$\frac{4}{5} = \frac{}{10} = \frac{}{20} = \frac{}{40} = \frac{}{} = \frac{}{} =$

$\frac{6}{7} = \frac{}{14} = \frac{}{28} = \frac{}{56} = \frac{}{} = \frac{}{} =$

$\frac{5}{6} = \frac{}{12} = \frac{}{24} = \frac{}{48} = \frac{}{} = \frac{}{} =$

c) $\frac{3}{5} = \frac{}{10} = \frac{12}{20} = \frac{}{50} = \frac{60}{}$

$\frac{2}{3} = \frac{4}{} = \frac{}{9} = \frac{10}{} = \frac{}{60}$

$\frac{3}{4} = \frac{}{12} = \frac{15}{} = \frac{}{36} = \frac{36}{}$

$\frac{5}{6} = \frac{15}{} = \frac{}{24} = \frac{30}{} = \frac{}{72}$

$\frac{3}{7} = \frac{}{21} = \frac{18}{} = \frac{}{56} = \frac{}{84}$

d) $1\frac{1}{2} = \frac{3}{2} = \frac{6}{} = \frac{}{8} = \frac{24}{}$

$1\frac{1}{3} = \frac{}{3} = \frac{12}{} = \frac{}{27} = \frac{72}{}$

$1\frac{2}{5} = \frac{}{5} = \frac{21}{} = \frac{42}{} = \frac{}{55}$

$1\frac{5}{8} = \frac{26}{} = \frac{}{24} = \frac{}{40} = \frac{91}{}$

$2\frac{2}{3} = \frac{24}{} = \frac{32}{} = \frac{}{18} = \frac{}{36}$

Задание 5

a) $\frac{2}{4} =$

$\frac{3}{6} =$

$\frac{4}{8} =$

$\frac{5}{10} =$

$\frac{6}{18} =$

b) $\frac{7}{28} =$

$\frac{8}{40} =$

$\frac{9}{54} =$

$\frac{10}{70} =$

$\frac{11}{99} =$

c) $\frac{24}{72} =$

$\frac{14}{56} =$

$\frac{13}{65} =$

$\frac{40}{100} =$

$\frac{45}{75} =$

d) $\frac{54}{81} =$

$\frac{72}{96} =$

$\frac{48}{60} =$

$\frac{84}{112} =$

$\frac{72}{108} =$

e) $\frac{48}{120} =$

$\frac{81}{135} =$

$\frac{96}{120} =$

$\frac{140}{168} =$

$\frac{125}{175} =$

f) $\frac{144}{192} =$

$\frac{297}{396} =$

$\frac{144}{180} =$

$\frac{128}{160} =$

$\frac{144}{336} =$

g) $\frac{180}{396} =$

$\frac{120}{216} =$

$\frac{150}{210} =$

$\frac{252}{420} =$

$\frac{112}{280} =$

h) $\frac{1872}{2496} =$

$\frac{2520}{3150} =$

$\frac{2430}{2916} =$

$\frac{2808}{3276} =$

$\frac{3136}{3584} =$

i) $\frac{78}{156} =$

$\frac{196}{98} =$

$\frac{195}{130} =$

$\frac{38}{57} =$

$\frac{1234}{2468} =$

Задание 6

a) $\frac{1}{2} + \frac{1}{4} =$

$\frac{1}{3} + \frac{1}{6} =$

$\frac{1}{4} + \frac{1}{8} =$

$\frac{1}{5} + \frac{1}{10} =$

$\frac{1}{3} + \frac{1}{9} =$

$\frac{1}{4} + \frac{1}{12} =$

$\frac{1}{5} + \frac{1}{15} =$

b) $\frac{1}{2} - \frac{1}{4} =$

$\frac{1}{3} - \frac{1}{6} =$

$\frac{1}{4} - \frac{1}{8} =$

$\frac{1}{5} - \frac{1}{10} =$

$\frac{1}{3} + \frac{1}{12} =$

$\frac{1}{4} + \frac{1}{16} =$

$\frac{1}{5} + \frac{1}{20} =$

c) $\frac{1}{2} + \frac{1}{4} + \frac{1}{8} =$

$\frac{1}{3} + \frac{1}{6} + \frac{1}{12} =$

$\frac{1}{4} + \frac{1}{8} + \frac{1}{16} =$

$\frac{1}{5} + \frac{1}{10} + \frac{1}{20} =$

d) $\frac{1}{2} - \frac{1}{4} + \frac{1}{8} =$

$\frac{1}{3} - \frac{1}{6} + \frac{1}{12} =$

$\frac{1}{4} - \frac{1}{8} + \frac{1}{16} =$

$\frac{1}{5} - \frac{1}{10} + \frac{1}{20} =$

e) $\frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} =$

$\frac{1}{3} + \frac{1}{6} + \frac{1}{12} + \frac{1}{24} =$

$\frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \frac{1}{32} =$

$\frac{1}{5} + \frac{1}{10} + \frac{1}{20} + \frac{1}{40} =$

Задание 7

a) $\frac{1}{2} + \frac{1}{4} =$

$\frac{1}{2} + \frac{1}{4} + \frac{1}{8} =$

$\frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} =$

$\frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \frac{1}{32} =$

b) $\frac{1}{2} - \frac{1}{4} =$

$\frac{1}{2} - \frac{1}{4} + \frac{1}{8} =$

$\frac{1}{2} - \frac{1}{4} + \frac{1}{8} - \frac{1}{16} =$

$\frac{1}{2} - \frac{1}{4} + \frac{1}{8} - \frac{1}{16} + \frac{1}{32} =$

c) $\frac{1}{2} + \frac{1}{4} =$

$\frac{1}{4} + \frac{1}{6} =$

$\frac{1}{6} + \frac{1}{8} =$

$\frac{1}{8} + \frac{1}{10} =$

d) $\frac{1}{3} + \frac{1}{6} =$

$\frac{1}{6} + \frac{1}{9} =$

$\frac{1}{9} + \frac{1}{12} =$

$\frac{1}{12} + \frac{1}{15} =$

e) $\frac{1}{5} + \frac{1}{10} =$

$\frac{1}{10} + \frac{1}{15} =$

$\frac{1}{15} + \frac{1}{20} =$

$\frac{1}{20} + \frac{1}{25} =$

f) $\frac{1}{2} + \frac{1}{3} =$

$\frac{1}{2} + \frac{1}{4} =$

$\frac{1}{2} + \frac{1}{5} =$

$\frac{1}{2} + \frac{1}{6} =$

g) $\frac{1}{3} + \frac{1}{4} =$

$\frac{1}{3} + \frac{1}{5} =$

$\frac{1}{3} + \frac{1}{6} =$

$\frac{1}{3} + \frac{1}{7} =$

h) $\frac{1}{4} + \frac{1}{5} =$

$\frac{1}{4} + \frac{1}{6} =$

$\frac{1}{4} + \frac{1}{7} =$

$\frac{1}{4} + \frac{1}{8} =$

Задание 8

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

$\frac{1}{3} - \frac{1}{4} =$

$\frac{1}{4} - \frac{1}{5} =$

$\frac{1}{5} - \frac{1}{6} =$

b) $\frac{1}{2} - \frac{1}{4} =$

$\frac{1}{3} - \frac{1}{5} =$

$\frac{1}{4} - \frac{1}{6} =$

$\frac{1}{5} - \frac{1}{7} =$

c) $\frac{1}{2} + \frac{1}{3} + \frac{1}{4} =$

$\frac{1}{3} + \frac{1}{4} + \frac{1}{5} =$

$\frac{1}{4} + \frac{1}{5} + \frac{1}{6} =$

$\frac{1}{5} + \frac{1}{6} + \frac{1}{7} =$

d) $\frac{1}{2} + \frac{1}{3} - \frac{1}{4} =$

$\frac{1}{3} + \frac{1}{4} - \frac{1}{5} =$

$\frac{1}{4} + \frac{1}{5} - \frac{1}{6} =$

$\frac{1}{5} + \frac{1}{6} - \frac{1}{7} =$

e) $\frac{1}{2} + \frac{1}{4} + \frac{1}{6} =$

$\frac{1}{4} + \frac{1}{6} + \frac{1}{8} =$

! $\frac{1}{6} + \frac{1}{8} + \frac{1}{10} =$

! $\frac{1}{8} + \frac{1}{10} + \frac{1}{12} =$

f) $\frac{1}{3} + \frac{1}{6} - \frac{1}{9} =$

$\frac{1}{6} + \frac{1}{9} - \frac{1}{12} =$

! $\frac{1}{9} + \frac{1}{12} - \frac{1}{15} =$

! $\frac{1}{12} + \frac{1}{15} - \frac{1}{18} =$

Задание 9

a) $\frac{2}{3} + \frac{1}{3} =$

$\frac{2}{3} + \frac{1}{6} =$

$\frac{2}{3} + \frac{1}{9} =$

$\frac{2}{3} + \frac{1}{12} =$

b) $\frac{3}{4} + \frac{1}{4} =$

$\frac{3}{4} + \frac{1}{8} =$

$\frac{3}{4} + \frac{1}{12} =$

$\frac{3}{4} + \frac{1}{16} =$

c) $\frac{4}{5} + \frac{1}{5} =$

$\frac{4}{5} + \frac{1}{10} =$

$\frac{4}{5} + \frac{1}{15} =$

$\frac{4}{5} + \frac{1}{20} =$

d) $\frac{3}{4} + \frac{3}{4} =$

$\frac{3}{8} + \frac{3}{4} =$

$\frac{3}{12} + \frac{3}{4} =$

$\frac{3}{16} + \frac{3}{4} =$

e) $\frac{2}{5} + \frac{2}{5} =$

$\frac{2}{5} + \frac{2}{10} =$

$\frac{2}{5} + \frac{2}{15} =$

$\frac{2}{5} + \frac{2}{20} =$

f) $\frac{5}{6} - \frac{5}{6} =$

$\frac{5}{6} - \frac{5}{12} =$

$\frac{5}{6} - \frac{5}{18} =$

$\frac{5}{6} - \frac{5}{24} =$

g) $\frac{3}{7} + \frac{4}{7} =$

$\frac{3}{14} + \frac{4}{7} =$

$\frac{3}{21} + \frac{4}{7} =$

$\frac{3}{28} + \frac{4}{7} =$

h) $\frac{3}{8} + \frac{5}{8} =$

$\frac{3}{8} + \frac{5}{16} =$

$\frac{3}{8} + \frac{5}{24} =$

$\frac{3}{8} + \frac{5}{32} =$

i) $\frac{7}{9} - \frac{5}{9} =$

$\frac{7}{9} - \frac{5}{18} =$

$\frac{7}{9} - \frac{5}{27} =$

$\frac{7}{9} - \frac{5}{36} =$

Задание 10

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

$\frac{3}{4} - \frac{2}{3} =$

$\frac{4}{5} - \frac{3}{4} =$

$\frac{5}{6} - \frac{3}{4} =$

$\frac{7}{8} - \frac{5}{6} =$

b) $\frac{1}{3} + \frac{2}{5} =$

$\frac{3}{5} - \frac{2}{7} =$

$\frac{3}{7} + \frac{2}{9} =$

$\frac{4}{9} + \frac{3}{11} =$

$\frac{3}{10} - \frac{4}{15} =$

c) $\frac{1}{4} + \frac{3}{7} =$

$\frac{7}{8} - \frac{2}{7} =$

$\frac{2}{7} + \frac{7}{10} =$

$\frac{5}{8} + \frac{3}{11} =$

$\frac{9}{10} - \frac{7}{12} =$

d) $\frac{5}{6} - \frac{1}{2} - \frac{2}{9} =$

$\frac{7}{15} - \frac{1}{4} - \frac{1}{5} =$

$\frac{4}{9} - \frac{5}{8} + \frac{5}{24} =$

$\frac{2}{5} - \frac{5}{18} - \frac{4}{45} =$

$\frac{2}{3} - \frac{2}{9} - \frac{2}{5} =$

e) $\frac{3}{4} - \frac{2}{10} + \frac{1}{5} =$

$\frac{3}{4} - \frac{1}{6} + \frac{3}{8} =$

$\frac{3}{4} - \frac{4}{9} + \frac{2}{3} =$

$-\frac{4}{7} + \frac{5}{6} + \frac{2}{3} =$

$-\frac{3}{25} + \frac{3}{5} + \frac{1}{2} =$

f) $\frac{2}{3} + \frac{3}{4} + \frac{1}{2} + \frac{1}{12} =$

$\frac{1}{2} + \frac{5}{6} - \frac{3}{8} + \frac{1}{24} =$

$\frac{5}{7} + \frac{3}{5} + \frac{8}{15} + \frac{16}{105} =$

$\frac{5}{16} + \frac{3}{4} + \frac{11}{80} + \frac{4}{5} =$

$\frac{1}{2} + \frac{3}{7} + \frac{1}{16} + \frac{1}{112} =$

g) $\frac{2}{3} - \frac{5}{8} + \frac{1}{2} - \frac{5}{12} =$

$\frac{2}{9} + \frac{1}{4} + \frac{5}{12} - \frac{2}{3} =$

$\frac{7}{16} - \frac{5}{8} + \frac{2}{3} - \frac{5}{12} =$

$\frac{7}{25} - \frac{2}{15} + \frac{2}{3} - \frac{4}{5} =$

$\frac{3}{8} - \frac{1}{9} + \frac{5}{18} - \frac{11}{24} =$

Задание 11

a) $1\frac{1}{2} + \frac{1}{2} =$

$1\frac{1}{3} + \frac{1}{3} =$

$1\frac{1}{4} + \frac{1}{4} =$

$1\frac{1}{5} + \frac{1}{5} =$

b) $1\frac{1}{2} + \frac{1}{4} =$

$1\frac{1}{3} + \frac{1}{6} =$

$1\frac{1}{4} + \frac{1}{8} =$

$1\frac{1}{5} + \frac{1}{10} =$

c) $2\frac{1}{2} - 1\frac{1}{6} =$

$3\frac{1}{3} - 2\frac{1}{9} =$

$4\frac{1}{4} - 3\frac{1}{12} =$

$5\frac{1}{5} - 4\frac{1}{15} =$

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

$1\frac{1}{3} - 1\frac{1}{4} =$

$1\frac{1}{4} - 1\frac{1}{5} =$

$1\frac{1}{5} - 1\frac{1}{6} =$

e) $1\frac{3}{8} + 1\frac{3}{4} =$

$1\frac{3}{5} + 1\frac{1}{2} =$

$1\frac{1}{4} + 1\frac{5}{6} =$

$1\frac{3}{10} + 1\frac{3}{4} =$

$1\frac{5}{12} + 1\frac{5}{8} =$

f) $2\frac{1}{2} - 1\frac{3}{4} =$

$1\frac{3}{10} - 1\frac{1}{20} =$

$2\frac{7}{12} - 1\frac{5}{6} =$

$1\frac{3}{7} - 1\frac{5}{28} =$

$2\frac{5}{12} - 1\frac{2}{3} =$

Задание 12

a) $1 \cdot \frac{1}{2} =$

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

$3 \cdot \frac{1}{4} =$

$4 \cdot \frac{1}{5} =$

b) $\frac{1}{6} \cdot 1 =$

$\frac{1}{7} \cdot 2 =$

$\frac{1}{8} \cdot 3 =$

$\frac{1}{9} \cdot 4 =$

c) $2 \cdot \frac{1}{2} =$

$3 \cdot \frac{1}{6} =$

$4 \cdot \frac{1}{12} =$

$5 \cdot \frac{1}{15} =$

$6 \cdot \frac{1}{12} =$

d) $\frac{1}{3} \cdot 3 =$

$\frac{1}{8} \cdot 4 =$

$\frac{1}{20} \cdot 5 =$

$\frac{1}{48} \cdot 6 =$

$\frac{1}{84} \cdot 7 =$

e) $2 \cdot \frac{2}{5} =$

$2 \cdot \frac{3}{7} =$

$2 \cdot \frac{4}{9} =$

$2 \cdot \frac{5}{11} =$

$2 \cdot \frac{6}{12} =$

f) $\frac{3}{7} \cdot 3 =$

$\frac{4}{13} \cdot 3 =$

$\frac{5}{16} \cdot 3 =$

$\frac{6}{19} \cdot 3 =$

$\frac{7}{28} \cdot 3 =$

g) $2 \cdot \frac{3}{8} =$

$\frac{4}{15} \cdot 3 =$

$4 \cdot \frac{5}{24} =$

$\frac{6}{35} \cdot 5 =$

$6 \cdot \frac{6}{37} =$

h) $\frac{5}{22} \cdot 4 =$

$6 \cdot \frac{4}{33} =$

$\frac{3}{44} \cdot 8 =$

$10 \cdot \frac{2}{55} =$

$\frac{3}{44} \cdot 12 =$

i) $2 \cdot \frac{3}{4} =$

$3 \cdot \frac{4}{5} =$

$4 \cdot \frac{5}{6} =$

$5 \cdot \frac{6}{7} =$

j) $\frac{1}{3} \cdot 2 =$

$\frac{3}{5} \cdot 4 =$

$\frac{5}{7} \cdot 6 =$

$\frac{7}{9} \cdot 8 =$

! k) $2 \cdot 1\frac{1}{2} =$

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

$2 \cdot 1\frac{3}{4} =$

$2 \cdot 1\frac{4}{5} =$

Задание 13

a) $\frac{1}{3} \cdot \frac{1}{4} =$

$\frac{1}{4} \cdot \frac{1}{5} =$

$\frac{1}{5} \cdot \frac{1}{6} =$

$\frac{1}{6} \cdot \frac{1}{7} =$

b) $\frac{1}{2} \cdot \frac{2}{3} =$

$\frac{2}{3} \cdot \frac{3}{4} =$

$\frac{3}{4} \cdot \frac{4}{5} =$

$\frac{4}{5} \cdot \frac{5}{6} =$

c) $\frac{1}{3} \cdot \frac{6}{5} =$

$\frac{4}{6} \cdot \frac{9}{8} =$

$\frac{7}{9} \cdot \frac{12}{11} =$

$\frac{10}{12} \cdot \frac{15}{14} =$

d) $\frac{4}{3} \cdot \frac{3}{4} =$

$\frac{7}{11} \cdot \frac{22}{7} =$

$\frac{5}{8} \cdot \frac{24}{5} =$

$\frac{6}{7} \cdot \frac{14}{3} =$

$\frac{12}{11} \cdot \frac{33}{4} =$

e) $\frac{3}{5} \cdot \frac{2}{3} =$

$\frac{7}{10} \cdot \frac{11}{14} =$

$\frac{3}{5} \cdot \frac{7}{5} =$

$\frac{1}{6} \cdot \frac{11}{5} =$

$\frac{14}{5} \cdot \frac{1}{7} =$

f) $\frac{1}{2} \cdot \frac{1}{3} \cdot \frac{1}{4} =$

$\frac{1}{3} \cdot \frac{1}{4} \cdot \frac{1}{5} =$

$\frac{1}{4} \cdot \frac{1}{5} \cdot \frac{1}{6} =$

$\frac{1}{5} \cdot \frac{1}{6} \cdot \frac{1}{7} =$

g) $\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2} =$

$\frac{2}{3} \cdot \frac{2}{3} \cdot \frac{2}{3} =$

$\frac{3}{4} \cdot \frac{3}{4} \cdot \frac{3}{4} =$

$\frac{4}{5} \cdot \frac{4}{5} \cdot \frac{4}{5} =$

h) $\frac{1}{2} \cdot \frac{2}{3} \cdot \frac{3}{4} =$

$\frac{2}{3} \cdot \frac{3}{4} \cdot \frac{4}{5} =$

$\frac{3}{4} \cdot \frac{4}{5} \cdot \frac{5}{6} =$

$\frac{4}{5} \cdot \frac{5}{6} \cdot \frac{6}{7} =$

Задание 14

a) $\frac{3 \cdot 4 \cdot 10}{4 \cdot 10 \cdot 6} =$

$\frac{4 \cdot 5 \cdot 3}{3 \cdot 15 \cdot 4} =$

$\frac{11 \cdot 12 \cdot 14}{7 \cdot 3 \cdot 22} =$

$\frac{8 \cdot 9 \cdot 5}{5 \cdot 24 \cdot 15} =$

$\frac{7 \cdot 3 \cdot 20}{30 \cdot 14 \cdot 6} =$

b) $\frac{4}{5} \cdot \frac{5}{6} \cdot \frac{6}{7} \cdot \frac{7}{8} =$

$\frac{4 \cdot 5}{5 \cdot 6} \cdot \frac{6 \cdot 7}{7 \cdot 8} =$

$\frac{4}{5} \cdot \frac{5 \cdot 6 \cdot 7}{6 \cdot 7 \cdot 8} =$

$\frac{4 \cdot 5 \cdot 6}{5 \cdot 6 \cdot 7} \cdot \frac{7}{8} =$

$\frac{4}{5} \cdot \frac{5 \cdot 6}{6 \cdot 7} \cdot \frac{7}{8} =$

c) $\frac{3}{4} \cdot \frac{4}{10} \cdot \frac{10}{6} =$

$\frac{4}{3} \cdot \frac{5}{15} \cdot \frac{3}{4} =$

$\frac{7}{11} \cdot \frac{3}{12} \cdot \frac{22}{14} =$

$\frac{5}{8} \cdot \frac{24}{9} \cdot \frac{15}{5} =$

d) $\frac{3 \cdot 7 \cdot 24 \cdot 5 \cdot 60}{5 \cdot 4 \cdot 21 \cdot 36 \cdot 10} =$

$\frac{1 \cdot 8 \cdot 7 \cdot 3 \cdot 25}{2 \cdot 7 \cdot 2 \cdot 5 \cdot 15} =$

$\frac{28 \cdot 26 \cdot 12 \cdot 4 \cdot 2}{13 \cdot 7 \cdot 8 \cdot 2 \cdot 96} =$

e) $\frac{105 \cdot 63 \cdot 4 \cdot 17}{5 \cdot 21 \cdot 28 \cdot 51} =$

$\frac{324 \cdot 13 \cdot 12 \cdot 19 \cdot 2}{3 \cdot 156 \cdot 38 \cdot 9 \cdot 36} =$

$\frac{750 \cdot 44 \cdot 17 \cdot 10 \cdot 17 \cdot 19 \cdot 11 \cdot 14 \cdot 9}{11 \cdot 34 \cdot 425 \cdot 75 \cdot 2 \cdot 22 \cdot 57 \cdot 21 \cdot 4} =$

$\frac{8 \cdot 32 \cdot 27 \cdot 17 \cdot 2 \cdot 26 \cdot 6 \cdot 16 \cdot 95}{3 \cdot 9 \cdot 16 \cdot 4 \cdot 34 \cdot 19 \cdot 65 \cdot 12 \cdot 64} =$

$\frac{99 \cdot 32 \cdot 3 \cdot 4 \cdot 10 \cdot 12 \cdot 31 \cdot 44 \cdot 7}{15 \cdot 12 \cdot 11 \cdot 8 \cdot 4 \cdot 28 \cdot 11 \cdot 18 \cdot 124} =$

$\frac{24 \cdot 19 \cdot 109 \cdot 45 \cdot 24 \cdot 72 \cdot 28 \cdot 66}{327 \cdot 8 \cdot 171 \cdot 4 \cdot 48 \cdot 55 \cdot 36 \cdot 42} =$

$\frac{43 \cdot 8 \cdot 36 \cdot 13 \cdot 512 \cdot 121 \cdot 63 \cdot 20}{35 \cdot 11 \cdot 143 \cdot 72 \cdot 86 \cdot 8 \cdot 256 \cdot 9} =$

! f) $\frac{4 \cdot 9 \cdot 12 \cdot 14 \cdot 16 \cdot 20 \cdot 24 \cdot 25 \cdot 28 \cdot 45 \cdot 100 \cdot 120}{240 \cdot 125 \cdot 72 \cdot 64 \cdot 28 \cdot 25 \cdot 21 \cdot 20 \cdot 12 \cdot 18 \cdot 6} =$

$\frac{33 \cdot 14 \cdot 180 \cdot 84 \cdot 25 \cdot 65 \cdot 38 \cdot 69 \cdot 6 \cdot 65 \cdot 625 \cdot 504 \cdot 3 \cdot 12}{6 \cdot 75 \cdot 125 \cdot 26 \cdot 92 \cdot 39 \cdot 2 \cdot 77 \cdot 57 \cdot 72 \cdot 50 \cdot 21 \cdot 25 \cdot 36 \cdot 42} =$

Задание 15

a) $\frac{1}{2} : 2 =$

$\frac{1}{3} : 3 =$

$\frac{1}{4} : 4 =$

$\frac{1}{5} : 5 =$

b) $\frac{1}{2} : 3 =$

$\frac{1}{3} : 4 =$

$\frac{1}{4} : 5 =$

$\frac{1}{5} : 6 =$

c) $\frac{2}{3} : 2 =$

$\frac{3}{4} : 3 =$

$\frac{4}{5} : 4 =$

$\frac{5}{6} : 5 =$

d) $\frac{2}{3} : 4 =$

$\frac{3}{4} : 5 =$

$\frac{4}{5} : 6 =$

$\frac{5}{6} : 7 =$

e) $2 : \frac{1}{3} =$

$3 : \frac{1}{4} =$

$4 : \frac{1}{5} =$

$5 : \frac{1}{6} =$

f) $2 : \frac{2}{3} =$

$3 : \frac{3}{4} =$

$4 : \frac{4}{5} =$

$5 : \frac{5}{6} =$

g) $1 : \frac{3}{4} =$

$2 : \frac{4}{5} =$

$3 : \frac{5}{6} =$

$4 : \frac{6}{7} =$

h) $\frac{1}{2} : 2 =$

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

$\frac{2}{3} : 3 =$

$3 : \frac{2}{3} =$

i) $4 : \frac{3}{5} =$

$\frac{3}{5} : 4 =$

$5 : \frac{4}{6} =$

$\frac{4}{6} : 5 =$

Задание 16

a) $\frac{1}{3} : \frac{1}{2} =$

$\frac{1}{4} : \frac{1}{3} =$

$\frac{1}{5} : \frac{1}{4} =$

$\frac{1}{6} : \frac{1}{5} =$

b) $\frac{1}{2} : \frac{1}{3} =$

$\frac{1}{3} : \frac{1}{4} =$

$\frac{1}{4} : \frac{1}{5} =$

$\frac{1}{5} : \frac{1}{6} =$

c) $\frac{1}{2} : \frac{1}{4} =$

$\frac{1}{3} : \frac{1}{5} =$

$\frac{1}{4} : \frac{1}{6} =$

$\frac{1}{5} : \frac{1}{7} =$

d) $\frac{1}{2} : \frac{1}{2} =$

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

$\frac{6}{7} : \frac{2}{7} =$

$\frac{5}{9} : \frac{5}{3} =$

$\frac{7}{8} : \frac{7}{4} =$

e) $\frac{3}{8} : \frac{9}{4} =$

$\frac{8}{14} : \frac{16}{7} =$

$\frac{3}{20} : \frac{12}{10} =$

$\frac{3}{35} : \frac{6}{7} =$

$\frac{5}{21} : \frac{20}{7} =$

f) $\frac{21}{55} : \frac{14}{33} =$

$\frac{8}{39} : \frac{12}{65} =$

$\frac{20}{11} : \frac{35}{22} =$

$\frac{21}{13} : \frac{48}{26} =$

$\frac{65}{16} : \frac{39}{8} =$

g) $1\frac{1}{5} : \frac{3}{5} =$

$1\frac{5}{3} : \frac{2}{3} =$

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

$1\frac{3}{5} : \frac{1}{10} =$

$1\frac{1}{15} : \frac{1}{30} =$

h) $3\frac{6}{11} : 1\frac{2}{11} =$

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

$3\frac{1}{2} : 10\frac{1}{2} =$

$3\frac{2}{5} : 1\frac{7}{10} =$

$2\frac{1}{10} : 4\frac{1}{5} =$

Задание 17

a) $\left(2\frac{1}{2}+\frac{1}{3}\right)\cdot\frac{3}{5}-\frac{7}{10}=$

$\left(2\frac{11}{12}+\frac{3}{4}\right)\cdot\frac{4}{11}-\frac{5}{6}=$

$\left(3\frac{1}{7}-\frac{2}{3}\right)\cdot 1\frac{3}{4}-3\frac{1}{3}=$

$\left(1\frac{2}{5}-\frac{3}{4}\right)\cdot\frac{10}{13}-\frac{1}{2}=$

b) $\left(\frac{5}{3}-\frac{3}{5}\right)\left(3-\frac{3}{16}\right)=$

$\left(\frac{9}{7}-\frac{7}{9}\right)\left(6-\frac{3}{32}\right)=$

$\left(\frac{19}{17}-\frac{17}{19}\right)\left(13\frac{1}{2}-\frac{1}{24}\right)=$

c) $\left(\frac{3}{2}-\frac{2}{3}\right)\left(5-\frac{5}{4}-\frac{3}{20}\right)=$

$\left(\frac{11}{9}-\frac{9}{11}\right)\left(10-\frac{5}{2}-\frac{3}{40}\right)=$

$\left(\frac{4}{3}-\frac{3}{4}\right)\left(7-\frac{7}{4}-\frac{3}{28}\right)=$

$\left(\frac{6}{5}-\frac{5}{6}\right)\left(11-\frac{11}{4}-\frac{3}{44}\right)=$

d) $\left(\frac{1}{2}+\frac{1}{3}\right):\left(\frac{1}{4}+\frac{1}{6}\right)=$

$\left(\frac{5}{6}-\frac{3}{4}\right):\left(\frac{1}{8}+\frac{1}{12}\right)=$

$\left(\frac{1}{2}-\frac{1}{3}\right):\left(\frac{1}{4}-\frac{1}{6}\right)=$

Задание 18

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

$\frac{1}{2} \cdot 5 - \frac{1}{2} \cdot 3 =$

$\frac{1}{3} \cdot 7 + \frac{1}{3} \cdot 5 =$

$\frac{1}{3} \cdot 7 - \frac{1}{3} \cdot 5 =$

b) $4 \cdot \frac{1}{3} + 2 \cdot \frac{1}{3} =$

$4 \cdot \frac{1}{3} - 2 \cdot \frac{1}{3} =$

$5 \cdot \frac{1}{4} + 3 \cdot \frac{1}{4} =$

$5 \cdot \frac{1}{4} - 5 \cdot \frac{1}{4} =$

c) $\frac{1}{2} \cdot 4 + \frac{1}{3} \cdot 4 =$

$\frac{1}{2} \cdot 4 - \frac{1}{3} \cdot 4 =$

$\frac{1}{3} \cdot 5 + \frac{1}{4} \cdot 5 =$

$\frac{1}{3} \cdot 5 - \frac{1}{4} \cdot 5 =$

d) $\frac{1}{2} \cdot \frac{3}{5} - \frac{1}{2} \cdot \frac{4}{7} =$

$\frac{1}{3} \cdot \frac{6}{7} - \frac{1}{3} \cdot \frac{5}{6} =$

$\frac{1}{4} \cdot \frac{3}{7} - \frac{1}{4} \cdot \frac{2}{5} =$

$\frac{1}{5} \cdot \frac{4}{9} - \frac{1}{5} \cdot \frac{2}{7} =$

e) $\frac{4}{5} \cdot \frac{2}{3} + \frac{7}{10} \cdot \frac{2}{3} =$

$\frac{5}{7} \cdot \frac{3}{4} + \frac{13}{21} \cdot \frac{3}{4} =$

$\frac{4}{9} \cdot \frac{4}{5} + \frac{29}{36} \cdot \frac{4}{5} =$

$\frac{4}{5} \cdot \frac{5}{6} + \frac{2}{11} \cdot \frac{5}{6} =$

$\frac{3}{5} \cdot \frac{6}{7} - \frac{2}{15} \cdot \frac{6}{7} =$

f) $\frac{1}{2} \cdot 8 - 3 \cdot \frac{1}{2} + \frac{1}{2} \cdot 2 - \frac{1}{2} \cdot 6 + \frac{1}{2} =$

$\frac{1}{3} \cdot \frac{4}{15} + \frac{5}{9} \cdot \frac{1}{3} + \frac{2}{3} \cdot \frac{1}{3} + \frac{1}{3} \cdot \frac{23}{45} =$

$\frac{4}{5} \cdot \frac{8}{9} - \frac{4}{5} \cdot \frac{2}{3} + \frac{1}{12} \cdot \frac{4}{5} + \frac{17}{18} \cdot \frac{4}{5} =$

$\frac{3 \cdot 2}{4 \cdot 5} + \frac{3}{4 \cdot 3} + \frac{3}{4 \cdot 25} + \frac{3 \cdot 14}{4 \cdot 15} =$

$\frac{3 \cdot 5}{4 \cdot 6} + \frac{59 \cdot 5}{60 \cdot 6} - \frac{5 \cdot 7}{6 \cdot 8} - \frac{5 \cdot 97}{120 \cdot 6} =$

Задание 19

a)

$\frac{1}{3}$	$\frac{2}{3}$
$\frac{3}{4}$	$\frac{7}{4}$
$\frac{2}{5}$	$\frac{3}{5}$
$\frac{3}{6}$	$\frac{1}{6}$
$\frac{7}{7}$	$\frac{8}{7}$
$\frac{4}{8}$	$\frac{3}{8}$
$\frac{0}{9}$	$\frac{1}{9}$

b)

$\frac{1}{9}$	$\frac{1}{10}$
$\frac{1}{25}$	$\frac{1}{24}$
$\frac{3}{8}$	$\frac{3}{7}$
$\frac{5}{11}$	$\frac{5}{12}$
$\frac{18}{36}$	$\frac{18}{37}$
$\frac{17}{99}$	$\frac{17}{100}$
$\frac{18}{36}$	$\frac{17}{34}$

c)

$\frac{2}{3}$	$\frac{7}{9}$
$\frac{3}{5}$	$\frac{14}{25}$
$\frac{5}{42}$	$\frac{1}{6}$
$\frac{3}{8}$	$\frac{31}{88}$
$\frac{5}{12}$	$\frac{23}{60}$
$\frac{3}{17}$	$\frac{10}{51}$
$\frac{21}{24}$	$\frac{7}{8}$

d)

$\frac{3}{4}$	$\frac{2}{3}$
$\frac{4}{5}$	$\frac{3}{4}$
$\frac{4}{5}$	$\frac{5}{6}$
$\frac{3}{10}$	$\frac{1}{3}$
$\frac{1}{4}$	$\frac{2}{7}$
$\frac{5}{6}$	$\frac{9}{11}$
$\frac{7}{8}$	$\frac{11}{13}$