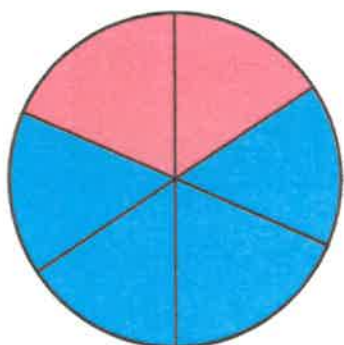
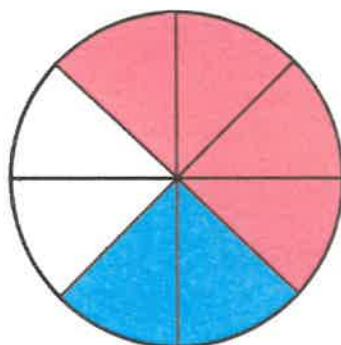


SČÍTÁNÍ ZLOMKŮ SE STEJNÝM JMENOVATELEM

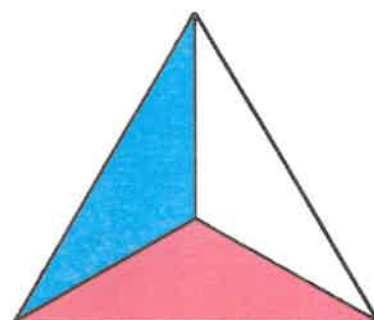
Zlomky se stejným jmenovatelem sčítáme tak, že čitatele zlomků sečteme a jmenovatele opíšeme.



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



$$\frac{2}{8} + \frac{4}{8} = \frac{6}{8}$$



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

19 Sčítej zlomky.

$$\frac{7}{20} + \frac{8}{20} = \frac{15}{20}$$

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

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

$$\frac{16}{20} + \frac{3}{20} = \boxed{}$$

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

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

$$\frac{12}{20} + \frac{8}{20} = \boxed{}$$

$$\frac{3}{9} + \frac{5}{9} = \boxed{}$$

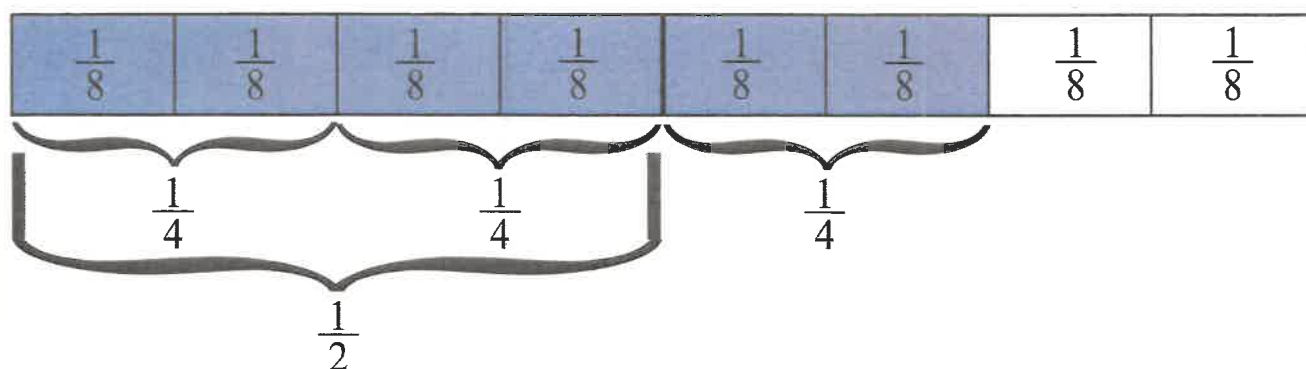
$$\frac{4}{10} + \frac{6}{10} = \boxed{}$$

$$\frac{6}{20} + \frac{9}{20} = \boxed{}$$

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

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

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



Sčítání zlomků se stejným jmenovatelem.

$$\frac{3}{4} + \frac{1}{4} = \underline{\hspace{2cm}}$$

$$\frac{2}{7} + \frac{4}{7} = \underline{\hspace{2cm}}$$

$$\frac{3}{8} + \frac{4}{8} = \underline{\hspace{2cm}}$$

$$\frac{6}{12} + \frac{5}{12} = \underline{\hspace{2cm}}$$

$$\frac{1}{2} + \frac{1}{2} = \underline{\hspace{2cm}}$$

$$\frac{2}{4} + \frac{1}{4} = \underline{\hspace{2cm}}$$

$$\frac{2}{3} + \frac{1}{3} = \underline{\hspace{2cm}}$$

$$\frac{3}{5} + \frac{1}{5} = \underline{\hspace{2cm}}$$

$$\frac{12}{18} + \frac{3}{18} = \underline{\hspace{2cm}}$$

$$\frac{4}{9} + \frac{3}{9} = \underline{\hspace{2cm}}$$

$$\frac{3}{7} + \frac{1}{7} = \underline{\hspace{2cm}}$$

$$\frac{20}{57} + \frac{32}{57} = \underline{\hspace{2cm}}$$

$$\frac{2}{8} + \frac{4}{8} = \underline{\hspace{2cm}}$$

$$\frac{6}{12} + \frac{4}{12} = \underline{\hspace{2cm}}$$

$$\frac{13}{42} + \frac{26}{42} = \underline{\hspace{2cm}}$$

$$\frac{7}{10} + \frac{2}{10} = \underline{\hspace{2cm}}$$

$$\frac{7}{15} + \frac{6}{15} = \underline{\hspace{2cm}}$$

$$\frac{14}{32} + \frac{17}{32} = \underline{\hspace{2cm}}$$

$$\frac{11}{15} + \frac{3}{15} = \underline{\hspace{2cm}}$$

$$\frac{18}{50} + \frac{9}{50} = \underline{\hspace{2cm}}$$

$$\frac{18}{24} + \frac{5}{24} = \underline{\hspace{2cm}}$$

$$\frac{7}{14} + \frac{6}{14} = \underline{\hspace{2cm}}$$

$$\frac{15}{60} + \frac{16}{60} = \underline{\hspace{2cm}}$$

$$\frac{32}{70} + \frac{27}{70} = \underline{\hspace{2cm}}$$

$$\frac{16}{25} + \frac{8}{25} = \underline{\hspace{2cm}}$$

$$\frac{12}{34} + \frac{21}{34} = \underline{\hspace{2cm}}$$

$$\frac{45}{90} + \frac{16}{90} = \underline{\hspace{2cm}}$$

$$\frac{4}{11} + \frac{5}{11} = \underline{\hspace{2cm}}$$

$$\frac{16}{44} + \frac{18}{44} = \underline{\hspace{2cm}}$$

$$\frac{54}{80} + \frac{17}{80} = \underline{\hspace{2cm}}$$

$$\frac{2}{7} + \frac{1}{7} + \frac{3}{7} = \underline{\hspace{2cm}}$$

$$\frac{8}{30} + \frac{3}{30} + \frac{7}{30} + \frac{6}{30} = \underline{\hspace{2cm}}$$

$$\frac{2}{5} + \frac{1}{5} + \frac{1}{5} = \underline{\hspace{2cm}}$$

$$\frac{4}{10} + \frac{2}{10} + \frac{3}{10} + \frac{1}{10} = \underline{\hspace{2cm}}$$

$$\frac{2}{9} + \frac{4}{9} + \frac{1}{9} = \underline{\hspace{2cm}}$$

$$\frac{15}{35} + \frac{6}{35} + \frac{12}{35} + \frac{1}{35} = \underline{\hspace{2cm}}$$

$$\frac{1}{8} + \frac{4}{8} + \frac{1}{8} = \underline{\hspace{2cm}}$$

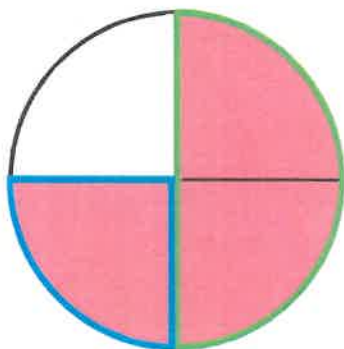
$$\frac{7}{30} + \frac{8}{30} + \frac{9}{30} + \frac{3}{30} = \underline{\hspace{2cm}}$$

$$\frac{1}{6} + \frac{2}{6} + \frac{3}{6} = \underline{\hspace{2cm}}$$

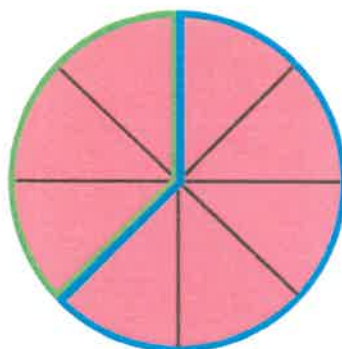
$$\frac{14}{45} + \frac{8}{45} + \frac{12}{45} + \frac{5}{45} = \underline{\hspace{2cm}}$$

ODČÍTÁNÍ ZLOMKŮ SE STEJNÝM JMENOVATELEM

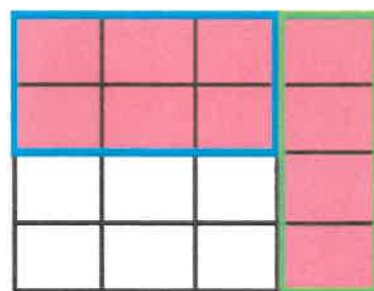
Zlomky se stejným jmenovatelem odčítáme tak, že čitatele zlomků odečteme a jmenovatele opíšeme.



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



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



$$\frac{10}{16} - \frac{4}{16} = \frac{6}{16}$$

20 Odčítej zlomky.

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

$$\frac{4}{5} - \frac{2}{5} = \frac{\quad}{\quad}$$

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

$$\frac{7}{8} - \frac{4}{8} = \frac{\quad}{\quad}$$

$$\frac{6}{9} - \frac{2}{9} = \frac{\quad}{\quad}$$

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

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

$$\frac{6}{8} - \frac{2}{8} = \frac{\quad}{\quad}$$

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

$$\frac{5}{7} - \frac{4}{7} = \frac{\quad}{\quad}$$

$$\frac{8}{9} - \frac{6}{9} = \frac{\quad}{\quad}$$

$$\frac{2}{5} - \frac{1}{5} = \frac{\quad}{\quad}$$

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

$$\frac{2}{2} - \frac{1}{2} = \frac{\quad}{\quad}$$

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

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

$$\frac{14}{16} - \frac{2}{16} = \frac{\quad}{\quad}$$

$$\frac{16}{16} - \frac{8}{16} = \frac{\quad}{\quad}$$

$$\frac{15}{16} - \frac{5}{16} = \frac{\quad}{\quad}$$

$$\frac{12}{16} - \frac{7}{16} = \frac{\quad}{\quad}$$

$$\frac{10}{16} - \frac{8}{16} = \frac{\quad}{\quad}$$

$$\frac{11}{16} - \frac{1}{16} = \frac{\quad}{\quad}$$

$$\frac{13}{16} - \frac{7}{16} = \frac{\quad}{\quad}$$

$$\frac{8}{16} - \frac{4}{16} = \frac{\quad}{\quad}$$

Odčítání zlomků se stejným jmenovatelem.

$$\frac{7}{8} - \frac{5}{8} = \underline{\hspace{2cm}}$$

$$\frac{6}{9} - \frac{4}{9} = \underline{\hspace{2cm}}$$

$$\frac{5}{6} - \frac{4}{6} = \underline{\hspace{2cm}}$$

$$\frac{4}{4} - \frac{1}{4} = \underline{\hspace{2cm}}$$

$$\frac{4}{5} - \frac{3}{5} = \underline{\hspace{2cm}}$$

$$\frac{6}{7} - \frac{5}{7} = \underline{\hspace{2cm}}$$

$$\frac{2}{3} - \frac{1}{3} = \underline{\hspace{2cm}}$$

$$\frac{2}{2} - \frac{1}{2} = \underline{\hspace{2cm}}$$

$$\frac{8}{9} - \frac{3}{9} = \underline{\hspace{2cm}}$$

$$\frac{7}{8} - \frac{3}{8} = \underline{\hspace{2cm}}$$

$$\frac{18}{25} - \frac{13}{25} = \underline{\hspace{2cm}}$$

$$\frac{25}{30} - \frac{18}{30} = \underline{\hspace{2cm}}$$

$$\frac{32}{45} - \frac{12}{45} = \underline{\hspace{2cm}}$$

$$\frac{16}{18} - \frac{7}{18} = \underline{\hspace{2cm}}$$

$$\frac{25}{80} - \frac{9}{80} = \underline{\hspace{2cm}}$$

$$\frac{9}{10} - \frac{6}{10} = \underline{\hspace{2cm}}$$

$$\frac{73}{50} - \frac{17}{50} = \underline{\hspace{2cm}}$$

$$\frac{36}{55} - \frac{19}{55} = \underline{\hspace{2cm}}$$

$$\frac{42}{60} - \frac{18}{60} = \underline{\hspace{2cm}}$$

$$\frac{31}{40} - \frac{12}{40} = \underline{\hspace{2cm}}$$

$$\frac{37}{40} - \frac{19}{40} = \underline{\hspace{2cm}}$$

$$\frac{68}{70} - \frac{39}{70} = \underline{\hspace{2cm}}$$

$$\frac{75}{90} - \frac{20}{90} = \underline{\hspace{2cm}}$$

$$\frac{49}{60} - \frac{12}{60} = \underline{\hspace{2cm}}$$

$$\frac{74}{99} - \frac{51}{99} = \underline{\hspace{2cm}}$$

$$\frac{12}{23} - \frac{11}{23} = \underline{\hspace{2cm}}$$

$$\frac{18}{33} - \frac{13}{33} = \underline{\hspace{2cm}}$$

$$\frac{12}{150} - \frac{8}{150} = \underline{\hspace{2cm}}$$

$$\frac{130}{200} - \frac{42}{200} = \underline{\hspace{2cm}}$$

$$\frac{83}{180} - \frac{52}{180} = \underline{\hspace{2cm}}$$

$$\frac{52}{60} - \frac{6}{60} - \frac{10}{60} = \underline{\hspace{2cm}}$$

$$\frac{70}{90} - \frac{15}{90} - \frac{15}{90} = \underline{\hspace{2cm}}$$

$$\frac{17}{25} - \frac{8}{25} - \frac{4}{25} = \underline{\hspace{2cm}}$$

$$\frac{8}{9} - \frac{3}{9} - \frac{4}{9} = \underline{\hspace{2cm}}$$

$$\frac{8}{8} - \frac{6}{8} - \frac{1}{8} = \underline{\hspace{2cm}}$$

$$\frac{15}{20} - \frac{3}{20} - \frac{7}{20} - \frac{2}{20} = \underline{\hspace{2cm}}$$

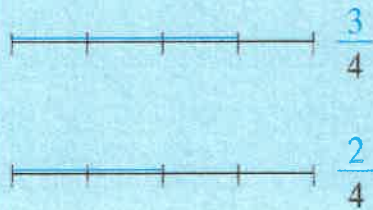
$$\frac{16}{18} - \frac{5}{18} - \frac{4}{18} - \frac{3}{18} = \underline{\hspace{2cm}}$$

$$\frac{72}{90} - \frac{14}{90} - \frac{20}{90} - \frac{15}{90} = \underline{\hspace{2cm}}$$

$$\frac{35}{40} - \frac{5}{40} - \frac{15}{40} - \frac{9}{40} = \underline{\hspace{2cm}}$$

$$\frac{60}{70} - \frac{18}{70} - \frac{25}{70} - \frac{7}{70} = \underline{\hspace{2cm}}$$

POROVNÁVÁNÍ ZLOMKŮ



$$\frac{3}{4} > \frac{2}{4}$$

Jestliže mají dva zlomky stejného jmenovatele, pak větší zlomek je ten, jehož **čitatel** je větší číslo.



Tři osminy kruhu je méně než celý kruh.

$$\frac{3}{8} < 1$$

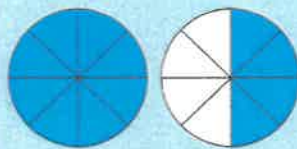
Je-li čitatel zlomku menší než jmenovatel, je zlomek **menší než 1**.



Osm osmin kruhu je celý kruh.

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

Jestliže je v čitateli a jmenovateli stejné číslo, je zlomek **roven 1**.



Dvanáct osmin kruhu je víc než jeden celý kruh.

$$\frac{12}{8} > 1$$

Je-li čitatel zlomku větší než jmenovatel, je zlomek **větší než 1**.

$$\frac{12}{8} = \frac{8}{8} + \frac{4}{8} = 1 \frac{4}{8} = \text{smíšené číslo}$$

Jeho zápis je složen z přirozeného čísla a zlomku **menšího než 1**.

114. Porovnej : >, <, =

$$\begin{array}{l} \frac{3}{4} \square \frac{2}{4} \\ \frac{8}{9} \square \frac{6}{9} \\ \frac{1}{3} \square \frac{2}{3} \\ \frac{5}{6} \square \frac{4}{6} \\ \frac{2}{10} \square \frac{2}{10} \\ \frac{4}{5} \square \frac{1}{5} \end{array}$$

$$\begin{array}{l} \frac{2}{10} \square \frac{6}{10} \\ \frac{4}{20} \square \frac{9}{20} \\ \frac{6}{6} \square \frac{4}{6} \\ \frac{2}{2} \square \frac{1}{2} \\ \frac{3}{5} \square \frac{3}{5} \\ \frac{3}{7} \square \frac{1}{7} \end{array}$$

$$\begin{array}{l} \frac{60}{100} \square \frac{52}{100} \\ \frac{12}{100} \square \frac{18}{100} \\ \frac{45}{60} \square \frac{32}{60} \\ \frac{26}{50} \square \frac{26}{50} \\ \frac{14}{18} \square \frac{18}{18} \\ \frac{6}{12} \square \frac{6}{12} \end{array}$$

$$\begin{array}{l} \frac{4}{2} \square \frac{1}{2} \\ \frac{1}{3} \square \frac{2}{3} \\ \frac{4}{4} \square \frac{4}{4} \\ \frac{1}{2} \square \frac{3}{2} \\ \frac{6}{3} \square \frac{2}{3} \\ \frac{1}{4} \square \frac{3}{4} \end{array}$$

$$\begin{array}{l} \frac{2}{10} \square \frac{12}{10} \\ \frac{8}{10} \square \frac{7}{10} \\ \frac{9}{9} \square \frac{9}{9} \\ \frac{7}{9} \square \frac{2}{9} \\ \frac{20}{100} \square \frac{36}{100} \\ \frac{91}{100} \square \frac{21}{100} \end{array}$$

115. Doplň, je-li zlomek menší než 1, větší než 1, roven 1:

$$\begin{array}{l} \frac{7}{6} \square 1 \\ \frac{9}{10} \square 1 \\ \frac{4}{4} \square 1 \\ \frac{5}{2} \square 1 \end{array}$$

$$\begin{array}{l} \frac{12}{10} \square 1 \\ \frac{4}{5} \square 1 \\ \frac{3}{3} \square 1 \\ \frac{8}{6} \square 1 \end{array}$$

$$\begin{array}{l} \frac{9}{4} \square 1 \\ \frac{8}{8} \square 1 \\ \frac{6}{9} \square 1 \\ \frac{4}{10} \square 1 \end{array}$$

$$\begin{array}{l} \frac{16}{20} \square 1 \\ \frac{18}{18} \square 1 \\ \frac{19}{14} \square 1 \\ \frac{8}{11} \square 1 \end{array}$$

$$\begin{array}{l} \frac{14}{10} \square 1 \\ \frac{6}{8} \square 1 \\ \frac{8}{6} \square 1 \\ \frac{13}{13} \square 1 \end{array}$$