Klapptest: Addition und Subtraktion von Brüchen

Aufgabe 1: Addition von gleichnamigen Brüchen.

1) $\dfrac{7}{8} + \dfrac{8}{8} =$

2) $\dfrac{2}{3} + \dfrac{3}{3} =$

3) $\dfrac{8}{9} + \dfrac{7}{9} =$

4) $\dfrac{7}{2} + \dfrac{3}{2} =$

Lösung:

1) $\dfrac{7}{8} + \dfrac{8}{8} = \dfrac{15}{8}$ ____

2) $\dfrac{2}{3} + \dfrac{3}{3} = \dfrac{5}{3}$ ____

3) $\dfrac{8}{9} + \dfrac{7}{9} = \dfrac{15}{9} = \dfrac{5}{3}$

4) $\dfrac{7}{2} + \dfrac{3}{2} = \dfrac{10}{2} = \dfrac{5}{1}$

Aufgabe 2: Addition von ungleichnamigen Brüchen.

1) $\dfrac{3}{9} + \dfrac{5}{9} =$

2) $\dfrac{8}{9} + \dfrac{8}{5} =$

3) $\dfrac{6}{2} + \dfrac{8}{4} =$

4) $\dfrac{5}{4} + \dfrac{6}{3} =$

5) $\dfrac{7}{6} + \dfrac{8}{5} =$

Lösung:

1) $\dfrac{3}{9} + \dfrac{5}{9} = \dfrac{3}{9} + \dfrac{5}{9} = \dfrac{8}{9}$ ____

2) $\dfrac{8}{9} + \dfrac{8}{5} = \dfrac{40}{45} + \dfrac{72}{45} = \dfrac{112}{45}$ ____

3) $\dfrac{6}{2} + \dfrac{8}{4} = \dfrac{12}{4} + \dfrac{8}{4} = \dfrac{20}{4} = \dfrac{5}{1}$

4) $\dfrac{5}{4} + \dfrac{6}{3} = \dfrac{15}{12} + \dfrac{24}{12} = \dfrac{39}{12} = \dfrac{13}{4}$

5) $\dfrac{7}{6} + \dfrac{8}{5} = \dfrac{35}{30} + \dfrac{48}{30} = \dfrac{83}{30}$ ____

Aufgabe 3: Subtraktion von gleichnamigen Brüchen.

1) $\dfrac{3}{9} - \dfrac{6}{9} =$

2) $\dfrac{3}{6} - \dfrac{7}{6} =$

3) $\dfrac{8}{9} - \dfrac{2}{9} =$

4) $\dfrac{7}{8} - \dfrac{4}{8} =$

Lösung:

1) $\dfrac{3}{9} - \dfrac{6}{9} = \dfrac{-3}{9} = \dfrac{-1}{3}$

2) $\dfrac{3}{6} - \dfrac{7}{6} = \dfrac{-4}{6} = \dfrac{-2}{3}$

3) $\dfrac{8}{9} - \dfrac{2}{9} = \dfrac{6}{9} = \dfrac{2}{3}$

4) $\dfrac{7}{8} - \dfrac{4}{8} = \dfrac{3}{8}$ ____

Aufgabe 4: Subtraktion von ungleichnamigen Brüchen.

1) $\dfrac{8}{3} - \dfrac{5}{6} =$

2) $\dfrac{8}{9} - \dfrac{2}{3} =$

3) $\dfrac{9}{10} - \dfrac{2}{5} =$

4) $\dfrac{7}{6} - \dfrac{6}{3} =$

5) $\dfrac{7}{5} - \dfrac{7}{6} =$

Lösung:

1) $\dfrac{8}{3} - \dfrac{5}{6} = \dfrac{16}{6} - \dfrac{5}{6} = \dfrac{11}{6}$ ____

2) $\dfrac{8}{9} - \dfrac{2}{3} = \dfrac{8}{9} - \dfrac{6}{9} = \dfrac{2}{9}$ ____

3) $\dfrac{9}{10} - \dfrac{2}{5} = \dfrac{9}{10} - \dfrac{4}{10} = \dfrac{5}{10} = \dfrac{1}{2}$

4) $\dfrac{7}{6} - \dfrac{6}{3} = \dfrac{7}{6} - \dfrac{12}{6} = \dfrac{-5}{6}$ ____

5) $\dfrac{7}{5} - \dfrac{7}{6} = \dfrac{42}{30} - \dfrac{35}{30} = \dfrac{7}{30}$ ____