

1. Kürze die folgenden Brüche so weit wie möglich:

$$\frac{45}{75} =$$

$$\frac{88}{132} =$$

$$\frac{96}{168} =$$

$$\frac{130}{52} =$$

$$\frac{3420}{1440} =$$

2. Erweitere die folgenden Brüche auf den gegebenen Nenner:

$$\frac{3}{4} = \frac{\quad}{48}$$

$$\frac{7}{5} = \frac{\quad}{40}$$

$$\frac{5}{12} = \frac{\quad}{240}$$

$$\frac{3}{8} = \frac{\quad}{1000}$$

$$\frac{16}{35} = \frac{\quad}{770}$$

3. Kürze die Ergebnisse soweit wie möglich und gib sie, wenn möglich, als gemischte Zahl an!

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

e) $\frac{3}{4} + \frac{1}{2} - \frac{5}{6} =$

b) $3\frac{2}{3} + 4\frac{5}{6} =$

f) $2\frac{3}{7} + 1\frac{1}{2} - \frac{5}{14} =$

c) $8\frac{5}{9} - 3\frac{1}{6} =$

g) $5\frac{1}{2} - 3\frac{2}{9} + 1\frac{1}{6} =$

d) $5\frac{1}{12} - 3\frac{3}{4} =$

h) $1\frac{4}{25} - \frac{1}{2} + 2\frac{3}{10} =$

4.

a) $2\frac{3}{4} - 1\frac{2}{5} \cdot 1\frac{2}{3} + 2\frac{1}{6} =$

d) $(3\frac{1}{3} - 1\frac{1}{5}) \cdot (1\frac{3}{8} + \frac{1}{2}) =$

b) $(2\frac{3}{4} - 1\frac{2}{5}) \cdot 1\frac{2}{3} + 2\frac{1}{6} =$

e) $(2\frac{1}{3} + 3\frac{1}{2}) \cdot (1\frac{1}{7} - \frac{1}{2}) =$

c) $3\frac{1}{3} - 1\frac{1}{5} \cdot (1\frac{3}{8} + \frac{1}{2}) =$

f) $(2\frac{1}{3} + 3\frac{1}{2}) \cdot 1\frac{1}{7} - \frac{1}{2} =$

5.

a) $(2\frac{2}{3} \cdot 1\frac{3}{5} - \frac{4}{5} \cdot 1\frac{1}{3}) : 3\frac{1}{5} =$

d) $(4\frac{1}{5} - 1\frac{2}{7}) \cdot \frac{5}{6} + (3\frac{1}{2} + 1\frac{2}{9}) : \frac{5}{18} =$

b) $(4\frac{2}{3} - 1\frac{3}{4}) \cdot 1\frac{3}{7} - 2\frac{1}{2} : \frac{3}{5} =$

e) $10\frac{2}{3} - (4\frac{2}{5} - 1\frac{7}{10}) : (2\frac{2}{5} - 1\frac{1}{2}) =$

c) $4\frac{3}{8} - 1\frac{5}{22} : 3\frac{3}{11} + 2\frac{1}{7} \cdot \frac{7}{12} =$

f) $7\frac{1}{2} - (3\frac{1}{5} : 2\frac{2}{15} + 1\frac{3}{4} \cdot 1\frac{3}{7}) =$

6.

a) $3\frac{1}{3} : (2\frac{1}{2})^2 + 6\frac{3}{10} : (5\frac{1}{2} - \frac{1}{10}) =$

c) $(\frac{1}{6} - (\frac{1}{2})^3) \cdot (2\frac{1}{2} + 1\frac{2}{3} : \frac{2}{5}) =$

b) $(2\frac{1}{4} \cdot (\frac{2}{3})^3 - \frac{3}{10} : 1\frac{4}{5}) \cdot 4\frac{4}{5} =$

d) $(2\frac{1}{12} - 1\frac{1}{3})^2 - (1\frac{1}{5} - 10\frac{1}{2} : 12) + \frac{1}{80} =$

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|--------------|-----------|-----------|------------|----------|----------|
| 1. 3/5 | 2/3 | 4/7 | 5/2 | 19/8 | |
| 2. 36/48 | 56/40 | 100/240 | 375/1000 | 352/770 | |
| 3. a) 4 1/15 | b) 8 1/2 | c) 5 7/18 | d) 1 1/3 | | |
| e) 5/12 | f) 3 4/7 | g) 3 4/9 | h) 2 24/25 | | |
| 4. a) 2 7/12 | b) 4 5/12 | c) 1 1/12 | d) 4 | e) 3 3/4 | f) 6 1/6 |
| 5. a) 1 | b) 0 | c) 5 1/4 | d) 19 3/7 | e) 7 2/3 | f) 3 1/2 |
| 6. a) 1 7/10 | b) 2 2/5 | c) 5/18 | d) 1/4 | | |