

Aufgabe 7

a)

$$\frac{3}{8} + \frac{4}{8} = \frac{7}{8}$$

b)

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

Weil

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

c)

$$\frac{9}{10} - \frac{1}{2} = \frac{2}{5}$$

Weil

$$\frac{9}{10} - \frac{2}{5} = \frac{9}{10} - \frac{4}{10} = \frac{5}{10} = \frac{1}{2}$$

d)

$$\frac{9}{20} - \frac{1}{4} = \frac{1}{5}$$

Weil

$$\frac{1}{4} + \frac{1}{5} = \frac{5}{20} + \frac{4}{20} = \frac{9}{20}$$

e)

$$\frac{5}{14} + \frac{1}{7} = \frac{1}{2}$$

Weil

$$\frac{1}{2} - \frac{1}{7} = \frac{7}{14} - \frac{2}{14} = \frac{5}{14}$$

f)

$$\frac{5}{9} + 0 = \frac{15}{27}$$

Weil

$$\frac{15}{27} - \frac{5}{9} = \frac{15}{27} - \frac{15}{27} = 0$$

g)

$$\frac{7}{8} - \frac{5}{8} = \frac{1}{4}$$

Weil

$$\frac{7}{8} - \frac{1}{4} = \frac{7}{8} - \frac{2}{8} = \frac{5}{8}$$

h)

$$\frac{7}{6} - \frac{2}{3} = \frac{1}{2}$$

Weil

$$\frac{2}{3} + \frac{1}{2} = \frac{4}{6} + \frac{3}{6} = \frac{7}{6}$$

Aufgabe 8

Ina

$$\frac{7}{8} - \frac{7}{12} = \frac{84}{96} - \frac{56}{96} = \frac{28}{96} = \frac{7}{24}$$

Oliver

$$\frac{7}{8} - \frac{7}{12} = \frac{84}{96} - \frac{56}{96} = \frac{28}{96} = \frac{7}{24}$$

Robert

$$\frac{7}{8} - \frac{7}{12} = \frac{42}{48} - \frac{28}{48} = \frac{14}{48} = \frac{7}{24}$$

Sara

$$\frac{7}{8} - \frac{7}{12} = \frac{21}{24} - \frac{14}{24} = \frac{7}{24}$$

Aufgabe 9

a)

$$\frac{3}{4} \text{ kg} - \frac{1}{8} \text{ kg} = \frac{6}{8} \text{ kg} - \frac{1}{8} \text{ kg} = \frac{5}{8} \text{ kg}$$

$$1 \text{ kg} = 1000 \text{ g}$$

$$1000 \text{ g} : 8 = 125 \text{ g}$$

$$\frac{6}{8} \text{ kg} = 125 \text{ g} \cdot 6 = 750 \text{ g}$$

$$\frac{1}{8} \text{ kg} = 125 \text{ g}$$

$$\frac{5}{8} \text{ kg} = 125 \text{ g} \cdot 5 = 625 \text{ g}$$

b)

$$\frac{2}{5} \text{ m} + \frac{1}{4} \text{ m} = \frac{8}{20} \text{ m} + \frac{5}{20} \text{ m} = \frac{13}{20} \text{ m}$$

Die Umwandlung in dm (die nächstkleinere Einheit) passt hier nicht!

$$1 \text{ m} = 100 \text{ cm}$$

$$100 \text{ cm} : 20 = 5 \text{ cm}$$

$$\frac{8}{20} m = 5 \text{ cm} \cdot 8 = 40 \text{ cm}$$

$$\frac{5}{20} m = 5 \text{ cm} \cdot 5 = 25 \text{ cm}$$

$$\frac{13}{20} m = 5 \text{ cm} \cdot 13 = 65 \text{ cm}$$

c)

$$\frac{1}{6} h + \frac{1}{4} h = \frac{2}{12} h + \frac{3}{12} h = \frac{5}{12} h$$

$$1 h = 60 \text{ min}$$

$$60 \text{ min} : 12 = 5 \text{ min}$$

$$\frac{2}{12} h = 5 \text{ min} \cdot 2 = 10 \text{ min}$$

$$\frac{3}{12} h = 5 \text{ min} \cdot 3 = 15 \text{ min}$$

$$\frac{5}{12} h = 5 \text{ min} \cdot 5 = 25 \text{ min}$$

d)

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

$$1 ha = 100 a$$

$$100 \text{ min} : 4 = 25 a$$

$$\frac{1}{4} ha = 25 a$$

$$\frac{2}{4} ha = 25 a \cdot 2 = 50 a$$