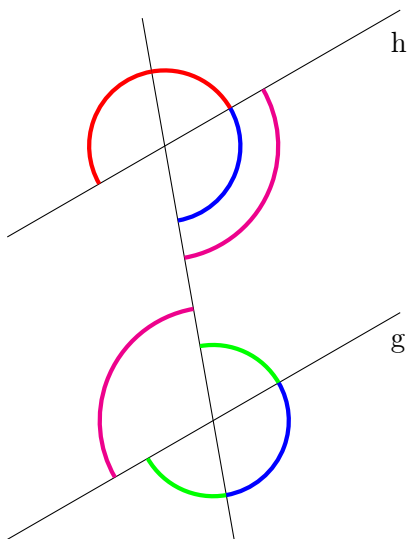


Arbeitsblatt 2 zur KA 1

1. a) $\frac{1}{2^1} \cdot \frac{4^2}{5} = \frac{2}{5}$ b) $\frac{6^3}{7} \cdot \frac{5}{8^4} = \frac{15}{28}$
 c) $\frac{3}{5} \cdot 56 = \frac{168}{5} = 33\frac{3}{5}$ d) $\frac{12^3}{16^4} \cdot \frac{12^3}{25^5} = \frac{9}{20}$
 e) $\frac{18^3}{25} \cdot \frac{7^1}{12^2} = \frac{3}{10}$ f) $8 \cdot 9\frac{2}{3} = 8 \cdot \frac{29}{3} = \frac{232}{3} = 77\frac{1}{3}$
 g) $6\frac{4}{9} \cdot 21 = \frac{58}{9} \cdot 21^7 = \frac{406}{3} = 135\frac{1}{3}$ h) $7\frac{3}{7} \cdot 2\frac{4}{5} = \frac{52}{7} \cdot \frac{14^2}{5} = \frac{104}{5} = 20\frac{4}{5}$
2. a) $3 : \frac{1}{4} = 3 \cdot 4 = 12$ b) $2\frac{1}{6} : 1\frac{1}{12} = \frac{13}{6} : \frac{13}{12} = \frac{13^1}{6^1} \cdot \frac{12^2}{13^1} = 2$
 c) $\frac{2}{3} : \frac{1}{2} = \frac{2}{3} \cdot \frac{2}{1} = \frac{4}{3} = 1\frac{1}{3}$ d) $\frac{3}{5} : \frac{9}{15} = \frac{3^1}{5^1} \cdot \frac{15^1}{9^1} = 1$
 e) $\frac{3}{4} : 1\frac{1}{3} = \frac{3}{4} : \frac{4}{3} = \frac{3}{4} \cdot \frac{3}{4} = \frac{9}{16}$ f) $\frac{5}{7} : 1\frac{17}{25} = \frac{5}{7} : \frac{42}{25} = \frac{5}{7} \cdot \frac{25}{42} = \frac{125}{294}$
 g) $\frac{8}{9} : 16 = \frac{8^1}{9 \cdot 16^2} = \frac{1}{18}$ h) $1\frac{2}{3} : 2\frac{3}{4} = \frac{5}{3} : \frac{11}{4} = \frac{5}{3} \cdot \frac{4}{11} = \frac{20}{33}$
3. a) $(\frac{1}{3} + \frac{5}{6}) \cdot \frac{6}{7} = (\frac{2}{6} + \frac{5}{6}) \cdot \frac{6}{7} = \frac{7^1}{6^1} \cdot \frac{6^1}{7^1} = 1$
 b) $\frac{2^1}{3^1} \cdot \frac{3^1}{3^1} \cdot \frac{7^1}{4} \cdot \frac{16^3}{28^4} = \frac{3}{16}$
 c) $\frac{2^1}{5} \cdot \frac{7}{10^2} + \frac{2}{3} : \frac{7}{9} = \frac{14}{25} + \frac{2}{3} \cdot \frac{9^3}{7} = \frac{14}{25} + \frac{6}{7} = \frac{98}{175} + \frac{150}{175} = \frac{248}{175} = 1\frac{73}{175}$
4. a) $\frac{3^1}{3^1} \cdot \frac{3^1}{12^4} = \frac{1}{4}$
 b) $\frac{7}{12}$
5. $1\frac{1}{2} : \frac{3}{10} = \frac{3^1}{2^1} \cdot \frac{10^6}{3^1} = 5[\text{Gläser}]$
6. $500 \cdot \frac{3}{8} = \frac{500^{125} \cdot 3}{8^2} = \frac{375}{2} = 187\frac{1}{2}[\text{l}]$
7. a) $\gamma = 100^\circ$ b) $\beta = 86^\circ$ c) $\alpha = 3^\circ$
 d) $\gamma = 80^\circ$ e) $\beta = \gamma = 49^\circ$ f) $\beta = 85^\circ; \gamma = 45^\circ$
8. Markiere jeweils mit unterschiedlichen Farben ...



- a) ein Paar Scheitelwinkel.
 b) ein Paar Nebenwinkel.
 c) ein Paar Stufenwinkel.
 d) ein Paar Wechselwinkel.