

Aufgabe 5

a)

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

$$\frac{2}{6} < \frac{3}{6} \quad \text{also ist} \quad \frac{1}{3} < \frac{3}{6}$$

b)

$$\frac{2}{4} = \frac{2 \cdot 2}{4 \cdot 2} = \frac{4}{8}$$

$$\text{Also ist} \quad \frac{2}{4} = \frac{4}{8}$$

c)

$$\frac{3}{4} = \frac{3 \cdot 2}{4 \cdot 2} = \frac{6}{8}$$

$$\frac{6}{8} < \frac{7}{8} \quad \text{also ist} \quad \frac{3}{4} < \frac{7}{8}$$

d)

$$\frac{4}{5} = \frac{4 \cdot 2}{5 \cdot 2} = \frac{8}{10}$$

$$\frac{8}{10} > \frac{6}{10} \quad \text{also ist} \quad \frac{4}{5} > \frac{6}{10}$$

e)

$$\frac{2}{3} = \frac{2 \cdot 5}{3 \cdot 5} = \frac{10}{15}$$

$$\frac{3}{5} = \frac{3 \cdot 3}{5 \cdot 3} = \frac{9}{15}$$

$$\frac{10}{15} > \frac{9}{15} \quad \text{also ist} \quad \frac{2}{3} > \frac{3}{5}$$

f)

$$\frac{2}{3} = \frac{2 \cdot 8}{3 \cdot 8} = \frac{16}{24}$$

$$\frac{5}{8} = \frac{5 \cdot 3}{8 \cdot 3} = \frac{15}{24}$$

$$\frac{16}{24} > \frac{15}{24} \quad \text{also ist} \quad \frac{2}{3} > \frac{5}{8}$$

g)

$$\frac{5}{7} > \frac{5}{19}$$

h)

$$\frac{3}{4} = \frac{3 \cdot 9}{4 \cdot 9} = \frac{27}{36}$$

$$\frac{7}{9} = \frac{7 \cdot 4}{9 \cdot 4} = \frac{28}{36}$$

$$\frac{27}{36} < \frac{28}{36} \quad \text{also ist} \quad \frac{3}{4} < \frac{7}{9}$$

i)

$$\frac{5}{11} = \frac{5 \cdot 5}{11 \cdot 5} = \frac{25}{55}$$

$$\frac{2}{5} = \frac{2 \cdot 11}{5 \cdot 11} = \frac{22}{55}$$

$$\frac{25}{55} > \frac{22}{55} \quad \text{also ist} \quad \frac{5}{11} > \frac{2}{5}$$

j)

$$\frac{4}{5} = \frac{4 \cdot 12}{5 \cdot 12} = \frac{48}{60}$$

$$\frac{6}{12} = \frac{6 \cdot 5}{12 \cdot 5} = \frac{30}{60}$$

$$\frac{48}{60} > \frac{30}{60} \quad \text{also ist} \quad \frac{4}{5} > \frac{6}{12}$$