

2 a)  $\frac{1}{10}; \frac{4}{10}; \frac{8}{10}; \frac{13}{10}; \frac{17}{10}$

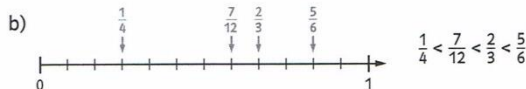
b)  $\frac{1}{6}; \frac{3}{6}; \frac{5}{6}; \frac{7}{6}; \frac{10}{6}$

c)  $\frac{2}{7}; \frac{6}{7}; \frac{9}{7}; \frac{11}{7}; \frac{13}{7}$

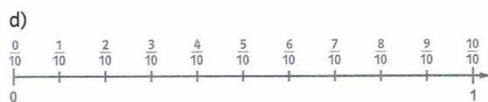
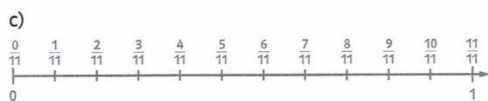
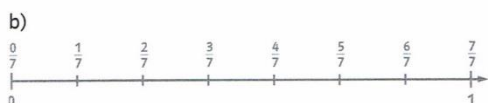
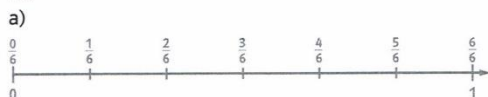
d)  $\frac{3}{8}; \frac{6}{8}; \frac{10}{8}; \frac{13}{8}; \frac{16}{8}$

3 siehe Figur 1

4



1.1



2.1 a)  $\frac{2}{10}; \frac{5}{10}; \frac{9}{10}; \frac{15}{10}; \frac{19}{10}$

b)  $\frac{1}{7}; \frac{4}{7}; \frac{8}{7}; \frac{12}{7}; \frac{14}{7}$

c)  $\frac{2}{6}; \frac{5}{6}; \frac{7}{6}; \frac{9}{6}; \frac{12}{6}$

Erweitern und Kürzen, Seite 26

1

	mit 3	mit 5	mit 7
$\frac{4}{5}$	$\frac{12}{15}$	$\frac{20}{25}$	$\frac{28}{35}$

2

	mit 2	mit 3	mit 6
$\frac{18}{24}$	$\frac{9}{12}$	$\frac{6}{8}$	$\frac{3}{4}$
$\frac{24}{30}$	$\frac{12}{15}$	$\frac{8}{10}$	$\frac{4}{5}$

3 a) 5    b) 9    c) 10    d) 4    e) 5

4 a) 2    b) 10    c) 7    d) 11    e) 4

5 a)  $\frac{5}{8} = \frac{5 \cdot 6}{8 \cdot 6} = \frac{30}{48}$     b)  $\frac{15}{21} = \frac{15:3}{21:3} = \frac{5}{7}$     c)  $\frac{12}{36} = \frac{12:6}{36:6} = \frac{2}{6}$

d)  $\frac{44}{48} = \frac{44:4}{48:4} = \frac{11}{12}$     e)  $\frac{4}{5} = \frac{4 \cdot 7}{5 \cdot 7} = \frac{28}{35}$     f)  $\frac{6}{7} = \frac{6 \cdot 3}{7 \cdot 3} = \frac{18}{21}$

g)  $\frac{55}{60} = \frac{55:5}{60:5} = \frac{11}{12}$     h)  $\frac{2}{7} = \frac{2 \cdot 11}{7 \cdot 11} = \frac{22}{77}$

6 a)  $\frac{36:12}{48:12} = \frac{3}{4}$     b)  $\frac{72:18}{90:18} = \frac{4}{5}$     c)  $\frac{216:24}{240:24} = \frac{9}{10}$

d)  $\frac{210:30}{330:30} = \frac{7}{11}$     e)  $\frac{360:120}{600:120} = \frac{3}{5}$     f)  $\frac{140:20}{160:20} = \frac{7}{8}$

1.1 a)  $\frac{7}{8} = \frac{42}{48} = \frac{56}{64} = \frac{77}{88}$

b)  $\frac{5}{9} = \frac{30}{54} = \frac{40}{72} = \frac{55}{99}$

c)  $\frac{2}{11} = \frac{12}{66} = \frac{16}{88} = \frac{22}{121}$

d)  $\frac{9}{13} = \frac{54}{78} = \frac{72}{104} = \frac{99}{143}$

e)  $\frac{3}{4} = \frac{18}{24} = \frac{24}{32} = \frac{33}{44}$

f)  $\frac{2}{3} = \frac{12}{18} = \frac{16}{24} = \frac{22}{33}$

g)  $\frac{25}{31} = \frac{150}{186} = \frac{200}{248} = \frac{275}{341}$

h)  $\frac{17}{21} = \frac{102}{126} = \frac{136}{168} = \frac{187}{231}$

2.1 a)  $\frac{14}{42} = \frac{2}{6} = \frac{7}{21}$

b)  $\frac{28}{56} = \frac{4}{8} = \frac{14}{28}$

c)  $\frac{70}{84} = \frac{10}{12} = \frac{35}{42}$

d)  $\frac{84}{126} = \frac{12}{18} = \frac{42}{63}$

e)  $\frac{42}{56} = \frac{6}{8} = \frac{21}{28}$

f)  $\frac{70}{98} = \frac{10}{14} = \frac{35}{49}$

g)  $\frac{28}{98} = \frac{4}{14} = \frac{14}{49}$

h)  $\frac{154}{168} = \frac{22}{24} = \frac{77}{84}$

3.1 a) 5    b) 9    c) 7    d) 5

4.1 a) 8    b) 12    c) 3    d) 4

5.1 a)  $\frac{25}{30} = \frac{25:5}{30:5} = \frac{5}{6}$

b)  $\frac{12}{7} = \frac{12 \cdot 3}{7 \cdot 3} = \frac{36}{21}$

c)  $\frac{41}{30} = \frac{41 \cdot 5}{30 \cdot 5} = \frac{205}{150}$

d)  $\frac{20}{16} = \frac{20:4}{16:4} = \frac{5}{4}$

e)  $\frac{48}{60} = \frac{48:12}{60:12} = \frac{4}{5}$

f)  $\frac{55}{67} = \frac{55 \cdot 7}{67 \cdot 7} = \frac{385}{469}$

6.1 a)  $\frac{9}{10}$     b)  $\frac{4}{3}$     c)  $\frac{5}{13}$     d)  $\frac{5}{6}$     e)  $\frac{60}{73}$

f)  $\frac{6}{11}$     g)  $\frac{7}{9}$     h)  $\frac{4}{7}$     i)  $\frac{3}{10}$     j)  $\frac{6}{5}$

k)  $\frac{8}{9}$     l)  $\frac{2}{3}$     m)  $\frac{4}{3}$     n)  $\frac{7}{4}$

7 Individuelle Lösung

Kompetenz-Test Brüche, Seite 27

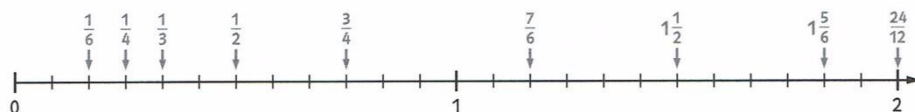
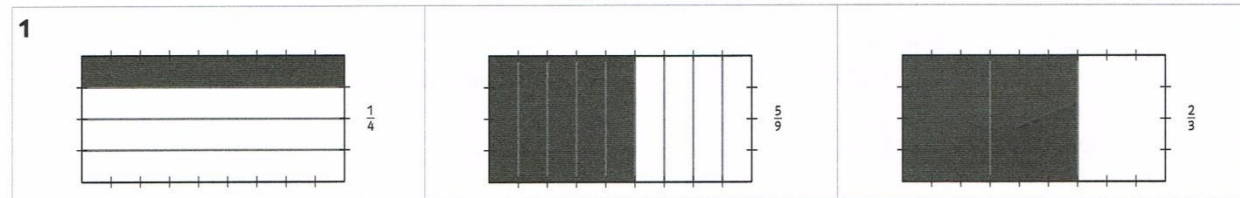


Fig. 1