

Wie kannst du Brüche erweitern und kürzen?



1. Ergänze diese Brüche zu gleichwertigen Brüchen.

$$\frac{2}{5} = \frac{10}{25} = \frac{6}{15} = \frac{12}{\quad} = \frac{\quad}{20} = \frac{\quad}{40} = \frac{4}{\quad} = \frac{14}{\quad} = \frac{\quad}{45}$$

$$\frac{3}{8} = \frac{\quad}{40} = \frac{9}{\quad} = \frac{\quad}{48} = \frac{12}{\quad} = \frac{\quad}{64} = \frac{\quad}{16} = \frac{21}{\quad} = \frac{27}{\quad}$$

$$\frac{5}{6} = \frac{25}{\quad} = \frac{15}{\quad} = \frac{\quad}{36} = \frac{\quad}{24} = \frac{40}{\quad} = \frac{\quad}{12} = \frac{35}{\quad} = \frac{45}{\quad}$$

$$\frac{4}{7} = \frac{20}{\quad} = \frac{12}{\quad} = \frac{\quad}{42} = \frac{16}{\quad} = \frac{32}{\quad} = \frac{\quad}{14} = \frac{\quad}{49} = \frac{36}{\quad}$$

$$\frac{3}{4} = \frac{\quad}{20} = \frac{9}{\quad} = \frac{18}{\quad} = \frac{\quad}{16} = \frac{\quad}{32} = \frac{6}{\quad} = \frac{21}{\quad} = \frac{\quad}{36}$$



2. Kürze diese Brüche so weit wie möglich:

$$\frac{96}{168} = \frac{48}{84} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

$$\frac{72}{96} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$$



3. Kürze diese Brüche vollständig. Notiere Zwischenschritte auf einem Notizzettel.

$$\frac{12}{60} = \frac{1}{5} \qquad \frac{8}{70} = \frac{\quad}{\quad} \qquad \frac{8}{20} = \frac{\quad}{\quad}$$

$$\frac{4}{144} = \frac{\quad}{\quad} \qquad \frac{7}{42} = \frac{\quad}{\quad} \qquad \frac{3}{72} = \frac{\quad}{\quad}$$

$$\frac{25}{30} = \frac{\quad}{\quad} \qquad \frac{35}{252} = \frac{\quad}{\quad} \qquad \frac{20}{216} = \frac{\quad}{\quad}$$

erweitern und kürzen?



1. Ergänze diese Brüche zu gleichwertigen Brüchen.

$$\frac{2}{5} = \frac{10}{25} = \frac{6}{15} = \frac{12}{30} = \frac{8}{20} = \frac{16}{40} = \frac{4}{10} = \frac{14}{35} = \frac{18}{45}$$

$$\frac{3}{8} = \frac{15}{40} = \frac{9}{24} = \frac{18}{48} = \frac{12}{32} = \frac{24}{64} = \frac{6}{16} = \frac{21}{56} = \frac{27}{72}$$

$$\frac{5}{6} = \frac{25}{30} = \frac{15}{18} = \frac{30}{36} = \frac{20}{24} = \frac{40}{48} = \frac{10}{12} = \frac{35}{42} = \frac{45}{54}$$

$$\frac{4}{7} = \frac{20}{35} = \frac{12}{21} = \frac{24}{42} = \frac{16}{28} = \frac{32}{56} = \frac{8}{14} = \frac{28}{49} = \frac{36}{63}$$

$$\frac{3}{4} = \frac{15}{20} = \frac{9}{12} = \frac{18}{24} = \frac{12}{16} = \frac{24}{32} = \frac{6}{8} = \frac{21}{28} = \frac{27}{36}$$



2. Kürze diese Brüche so weit wie möglich: Lösungsbeispiele

$$\frac{96}{168} = \frac{48}{84} = \frac{24}{42} = \frac{12}{21} = \frac{4}{7}$$

$$\frac{72}{96} = \frac{36}{48} = \frac{18}{24} = \frac{9}{12} = \frac{3}{4}$$



3. Kürze diese Brüche vollständig. Notiere Zwischenschritte auf einem Notizzettel.

$$\frac{12}{60} = \frac{1}{5}$$

$$\frac{8}{70} = \frac{4}{35}$$

$$\frac{8}{20} = \frac{2}{5}$$

$$\frac{4}{144} = \frac{1}{36}$$

$$\frac{7}{42} = \frac{1}{6}$$

$$\frac{3}{72} = \frac{1}{24}$$

$$\frac{25}{30} = \frac{5}{6}$$

$$\frac{35}{252} = \frac{5}{36}$$

$$\frac{20}{216} = \frac{5}{54}$$