



Zum Umwandeln von abbrechenden Dezimalbrüchen in Brüche und umgekehrt können Zehnerbrüche wie  $\frac{2}{10}$ ,  $\frac{5}{100}$  oder  $\frac{47}{1000}$  verwendet werden.

**Beispiel:**  $\frac{1}{4} = \frac{25}{100} = 0,25 = 25\%$ ; umgekehrt  $25\% = 0,25 = \frac{2}{10} + \frac{5}{100} = \frac{25}{100} = \frac{1}{4}$

...	ZT	T	H	Z	E	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	...
					0,	2	5		
				1	2,	5			
					0,	0	5		
					0,	0	0	3	
					0,	0	4	7	

**a)** Dezimalbrüche ablesen, als Zehnerbruch und als gekürzten Bruch **angeben**

$$0,25 = \frac{2}{10} + \frac{5}{100} = \frac{20}{100} + \frac{5}{100} = \frac{25}{100} = \frac{25:25}{100:25} = \frac{1}{4}$$

$$12,5 = 12 + \frac{5}{10} = \frac{120}{10} + \frac{5}{10} = \frac{125}{10} = \frac{125:5}{10:5} = \frac{25}{2} = 12 + \frac{1}{2}$$

$$0,05 = \frac{5}{100} = \frac{5:5}{100:5} = \frac{1}{20}$$

$$0,003 = \frac{3}{1000}$$

$$0,047 = \frac{4}{100} + \frac{7}{1000} = \frac{40}{1000} + \frac{7}{1000} = \frac{47}{1000}$$

**b)** Dezimalbrüche als Bruch und in Prozent **angeben**

$$0,2 = \frac{2}{10} = \frac{1}{5} = \frac{20}{100} = 20\%$$

$$0,14 = \frac{14}{100} = \frac{7}{50} = 14\%$$

$$0,35 = \frac{35}{100} = \frac{7}{20} = 35\%$$

$$2,5 = \frac{25}{10} = \frac{5}{2} = \frac{250}{100} = 250\%$$

$$12,4 = \frac{124}{10} = \frac{62}{5} = \frac{1240}{100} = 1240\%$$

$$0,12 = \frac{12}{100} = \frac{3}{25} = 12\%$$

$$0,125 = \frac{125}{1000} = \frac{1}{8} = 12,5\%$$

$$0,375 = \frac{375}{1000} = \frac{3}{8} = 37,5\%$$

$$0,4 = \frac{4}{10} = \frac{2}{5} = \frac{40}{100} = 40\%$$

$$0,8 = \frac{8}{10} = \frac{4}{5} = \frac{80}{100} = 80\%$$

$$0,9 = \frac{9}{10} = \frac{90}{100} = 90\%$$

**c) Brüche als Dezimalbruch und in Prozent **angeben****

$$\frac{3}{5} = \frac{6}{10} = 0,6 = \frac{60}{100} = 60\%$$

$$\frac{3}{10} = 0,3 = \frac{30}{100} = 30\%$$

$$\frac{3}{4} = \frac{75}{100} = 0,75 = 75\%$$

$$\frac{1}{8} = \frac{125}{1000} = 0,125 = 12,5\%$$

$$\frac{14}{100} = 0,14 = 14\%$$

$$\frac{15}{100} = 0,15 = 15\%$$

$$\frac{12}{20} = \frac{60}{100} = 0,6 = 60\%$$

$$\frac{15}{50} = \frac{30}{100} = 0,3 = 30\%$$

$$\frac{42}{1000} = 0,042 = 4,2\%$$

$$\frac{23}{2} = \frac{115}{10} = 11,5 = \frac{1150}{100} = 1150\%$$

$$\frac{7}{4} = \frac{175}{100} = 1,75 = 175\%$$

$$\frac{7}{40} = \frac{175}{1000} = 0,175 = 17,5\%$$

$$\frac{3}{15} = \frac{1}{5} = \frac{2}{10} = 0,2 = 20\%$$

**d) Prozentangaben als Dezimalbruch und als Bruch **angeben****

$$13\% = 0,13 = \frac{13}{100}$$

$$50\% = 0,5 = \frac{5}{10} = \frac{1}{2}$$

$$75\% = 0,75 = \frac{75}{100} = \frac{3}{4}$$

$$48\% = 0,48 = \frac{48}{100} = \frac{12}{25}$$

$$10\% = 0,1 = \frac{1}{10}$$

$$5\% = 0,05 = \frac{5}{100} = \frac{1}{20}$$

$$90\% = 0,9 = \frac{9}{10}$$

$$99\% = 0,99 = \frac{99}{100}$$