



## Englische Übungen zu „Bruchzahlen und Bruchrechnen“

- Calculate in your head.
  - $\frac{2}{3}$  of 60 min
  - $\frac{7}{10}$  of 40 cm<sup>2</sup>
  - $2\frac{1}{2}$  of 6 kg
  - $1\frac{3}{4}$  of 1000 m
- Find three fractions that equal 1.5.
- Convert these decimals to fractions by first writing them with a denominator of 10 or 100. Cancel, if possible, to give the fraction in its simplest form.
  - 1.75
  - 2.05
  - 0.8
  - 3.25
- I am equivalent to  $\frac{1}{2}$ . The sum of my numerator and denominator is 15. What fraction am I?
- Put these numbers in order, smallest first.  $\frac{3}{4}, \frac{5}{6}, \frac{1}{2}, \frac{2}{3}, 0.7$
- Between which natural numbers does the fraction  $\frac{38}{5}$  lie?
- Find the results.
  - $\frac{3}{4} - \frac{1}{2} - \frac{1}{6} + \frac{5}{12} =$
  - $\frac{3}{4} - (\frac{1}{2} - \frac{1}{6}) + \frac{5}{12} =$
- Multiply the fraction  $\frac{3}{5}$  by 10.
  - Extend the fraction  $\frac{3}{5}$  by 10.
- Use mental arithmetic.
  - Alison solved  $\frac{9}{10}$  of the multiple-choice questions correctly. If there were 50 multiple-choice questions, how many did she get right?
  - A Jupiter day is about  $\frac{3}{8}$  of an Earth day. How many Earth hours are there in a Jupiter day?





10. 1 kg of tomatoes costs € 1.48. What does  $1\frac{1}{2}$  kg of tomatoes cost?
11. Michael has a packet of 32 biscuits. Michael gives  $\frac{3}{8}$  of the biscuits to his sister Jane. Generous Jane then gives  $\frac{1}{4}$  of her share to a friend and eats the rest.
- How many biscuits does Michael have left at the end?
  - How many biscuits does Jane eat?

## Vocabulary

Englisch	Deutsch
calculate	berechnen
to equal	gleich sein
to convert	umwandeln
denominator	Nenner
to cancel	kürzen
to be equivalent	gleichen Wert haben
numerator	Zähler
put in order	ordnen
to extend	erweitern
mental arithmetic	Kopfrechnen
about	ungefähr
share	Anteil, Teil





## Solutions

1.
  - a. 40 min
  - b. 28 cm<sup>2</sup>
  - c. 15 kg
  - d. 1750 m
  
2.  $\frac{15}{10}, \frac{3}{2}, \frac{9}{6}$
  
3.
  - a.  $\frac{175}{100} = \frac{7}{4} = 1\frac{3}{4}$
  - b.  $\frac{205}{100} = \frac{41}{20} = 2\frac{1}{20}$
  - c.  $\frac{8}{10} = \frac{4}{5}$
  - d.  $\frac{325}{100} = \frac{13}{4} = 3\frac{1}{4}$
  
4. I am  $\frac{5}{10}$ .
  
5.  $\frac{1}{2}, \frac{2}{3}, 0.7, \frac{3}{4}, \frac{5}{6}$
  
6.  $\frac{38}{5}$  lies between 7 and 8.
  
7.
  - a.  $\frac{1}{2}$
  - b.  $\frac{5}{6}$
  
8.
  - a. 6
  - b. 30/50
  
9.
  - a. Alison got 45 answers correct.
  - b. There are 9 hours in a Jupiter day.
  
10. 1  $\frac{1}{2}$  kg of tomatoes costs 2.22 €.
  
11.
  - a. At the end Michael has left 20 biscuits.
  - b. Jane eats 9 biscuits.

