## Englische Übungen zu Bruchzahlen und Bruchrechnen

1. Calculate in your head.

a. 
$$\frac{2}{3}$$
 of 60 min =

b. 
$$\frac{7}{10}$$
 of 40 cm<sup>2</sup> =

c. 
$$2\frac{1}{2}$$
 of 6 kg =

d. 
$$1\frac{3}{4}$$
 of 1000 m =

- 2. Write down three fractions that equal 1.5.
- Convert these decimals to fractions. At first into a fraction with a denominator of 10 or 100. Then simplify them if possible.

$$0.8 =$$

- **4.** I am equivalent to  $\frac{1}{2}$ . The sum of my numerator and denominator is 15. What fraction am I?
- 5. Put these numbers in order, smallest first.  $\frac{3}{4}$ ,  $\frac{5}{6}$ ,  $\frac{1}{2}$ ,  $\frac{2}{3}$ , 0.7
- 6. The fraction  $\frac{38}{5}$  lies between the natural numbers \_\_\_\_ and \_\_\_\_. Circle the right answer.

3 and 4 6 and 7 7 and 8 9 and 10



## Arbeitsblatt ENGLISCH Bruchzahlen und Bruchrechnen B

7. Find the results.

a. 
$$\frac{3}{4} - \frac{1}{2} - \frac{1}{6} + \frac{5}{12} =$$

b. 
$$\frac{3}{4} - \left(\frac{1}{2} - \frac{1}{6}\right) + \frac{5}{12} =$$

8.

- a. Multiply the fraction  $\frac{3}{5}$  by 10 and simplify.
- b. Expand the fraction  $\frac{3}{5}$  by 10.
- 9. Use mental arithmetic.
  - a. Alison solved  $\frac{9}{10}$  of the multiple-choice questions correctly. If there were 50 multiple-choice questions, how many would she get right?
  - b. 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 32 biscuits. He 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.
  - a. How many biscuits does Michael have left at the end?
  - b. How many biscuits does Jane eat?

## **Vocabulary**

Englisch	Deutsch
calculate	berechnen
to equal	gleich sein
to convert	umwandeln
denominator	Nenner
to simplify a fraction	einen Bruch kürzen
to be equivalent	den 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. 
$$\frac{175}{100} = \frac{7}{4} = 1\frac{3}{4}$$

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b.  $\frac{205}{100} = \frac{41}{20} = 2\frac{1}{20}$   
c.  $\frac{8}{10} = \frac{4}{5}$   
d.  $\frac{325}{100} = \frac{13}{4} = 3\frac{1}{4}$ 

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.

- 8.
- a. 6
- b. 30/50
- 9.
- a. Alison would get 45 correct answers.
- b. There are 9 hours in a Jupiter day.
- 10. 1 ½ kg of tomatoes costs 2.22 €.
- 11.
- a. At the end Michael has 20 biscuits left.
- b. Jane eats 9 biscuits.



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