



Englische Übungen zu Rationale Zahlen

1. Which of the rational numbers $-\frac{23}{24}$ and $-\frac{24}{23}$ is situated left to -1 , which one right to -1 on the number line?

2. Calculate and compare the results. Which arithmetic property is to apply?

a.

1) $\left(-1\frac{7}{8}\right) + \left(+\frac{5}{4}\right) =$

2) $\left(+\frac{5}{4}\right) + \left(-1\frac{7}{8}\right) =$

b.

1) $\left(-\frac{5}{12}\right) + (-0.75) =$

2) $(-0.75) + \left(-\frac{5}{12}\right) =$

c.

1) $\left[\left(-2\frac{3}{5}\right) + \left(-\frac{7}{10}\right)\right] + \left(+\frac{3}{2}\right) =$

2) $\left(-2\frac{3}{5}\right) + \left[\left(-\frac{7}{10}\right) + \left(+\frac{3}{2}\right)\right] =$

3. Calculate the difference between the numbers!

a. $-\frac{3}{4}$ and $+\frac{4}{5}$

c. $-1\frac{3}{4}$ and 1.5

b. $-4\frac{2}{3}$ and $-1\frac{1}{2}$

d. $-3\frac{3}{4}$ and -1.2

4. Write down three rational numbers that are situated between -1.5 and -0.5 .
What algebraic sign does the product of these three numbers have?
Give reasons for your answer without calculating the result.

5. What is the result?

a. $2\frac{1}{2} \cdot \frac{2}{3} - \left(-1\frac{1}{2}\right) : \frac{4}{5} =$

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

c. $\left(-5\frac{1}{2}\right) \cdot 2\frac{1}{3} + \left(-\frac{3}{4}\right) : \frac{2}{3} =$

d. $\left[\left(-4\frac{2}{3}\right) \cdot \left(-1\frac{1}{2}\right) + \left(-4\frac{2}{9}\right)\right] : 4\frac{1}{6} =$





6. Write these ratios in their simplest form!

a. $5 : 15$

b. $6 : 10$

c. $3 : 33$

d. $14 : 35$

e. $0.5 : 4$

f. $36 : 48$

g. $4 : 6 : 8$

h. $10 : 15 : 25$

7. There are 5 adults and 60 pupils on a school excursion. Find the ratio of adults to pupils and write it in its simplest form!

8. This table shows the colour of smartphone cases sold. Write these ratios in their simplest form!

a. red to green smartphone cases

b. blue to black smartphone cases

c. green to black smartphone cases

d. black to red smartphone cases

smartphone cases	
red	24
green	16
blue	21
black	30

Vocabulary

Englisch	Deutsch
to be situated	sich befinden
number line	Zahlenstrahl
arithmetic property	Rechengesetze
to apply	verwenden, anwenden
algebraic sign	Vorzeichen
ratio	Verhältnis
adult	Erwachsene(r)
pupil	Schüler/in
school excursion	Schulausflug



