



Bestimmen Sie, ob jedes Problem, wenn es in eine Dezimalzahl umgewandelt wird, zu einer sich wiederholenden (R) oder abschließenden (T) Dezimalzahl führt.

Antworten

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1190476$$

- 1) $\frac{5}{23} =$ _____
- 2) $\frac{21}{25} =$ _____
- 3) $\frac{7}{13} =$ _____
- 4) $73 : 30 =$ _____
- 5) $61 : 7 =$ _____
- 6) $\frac{10}{24} =$ _____
- 7) $77 : 8 =$ _____
- 8) $\frac{3}{4} =$ _____
- 9) $\frac{8}{9} =$ _____
- 10) $107 : 15 =$ _____
- 11) $40 : 6 =$ _____
- 12) $\frac{16}{29} =$ _____
- 13) $139 : 22 =$ _____
- 14) $86 : 26 =$ _____
- 15) $\frac{13}{21} =$ _____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____



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$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1190476$$

- 1) $\frac{5}{23} =$ 23
- 2) $\frac{21}{25} =$ 5•5
- 3) $\frac{7}{13} =$ 13
- 4) $73 : 30 =$ 2•3•5
- 5) $61 : 7 =$ 7
- 6) $\frac{10}{24} =$ 2•2•3
- 7) $77 : 8 =$ 2•2•2
- 8) $\frac{3}{4} =$ 2•2
- 9) $\frac{8}{9} =$ 3•3
- 10) $107 : 15 =$ 3•5
- 11) $40 : 6 =$ 3
- 12) $\frac{16}{29} =$ 29
- 13) $139 : 22 =$ 2•11
- 14) $86 : 26 =$ 13
- 15) $\frac{13}{21} =$ 3•7

Antworten

1. R
2. T
3. R
4. R
5. R
6. R
7. T
8. T
9. R
10. R
11. R
12. R
13. R
14. R
15. R