



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.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1\overline{190476}$$

- 1) $\frac{2}{5} =$ _____
- 2) $47 : 9 =$ _____
- 3) $141 : 16 =$ _____
- 4) $108 : 11 =$ _____
- 5) $\frac{9}{17} =$ _____
- 6) $\frac{12}{28} =$ _____
- 7) $\frac{8}{20} =$ _____
- 8) $\frac{2}{26} =$ _____
- 9) $7 : 2 =$ _____
- 10) $151 : 30 =$ _____
- 11) $\frac{10}{12} =$ _____
- 12) $\frac{12}{13} =$ _____
- 13) $\frac{4}{14} =$ _____
- 14) $92 : 21 =$ _____
- 15) $10 : 4 =$ _____

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



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

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) $\frac{2}{5} =$ 5
- 2) $47 : 9 =$ 3•3
- 3) $141 : 16 =$ 2•2•2•2
- 4) $108 : 11 =$ 11
- 5) $\frac{9}{17} =$ 17
- 6) $\frac{12}{28} =$ 7
- 7) $\frac{8}{20} =$ 5
- 8) $\frac{2}{26} =$ 13
- 9) $7 : 2 =$ 2
- 10) $151 : 30 =$ 2•3•5
- 11) $\frac{10}{12} =$ 2•3
- 12) $\frac{12}{13} =$ 13
- 13) $\frac{4}{14} =$ 7
- 14) $92 : 21 =$ 3•7
- 15) $10 : 4 =$ 2

Antworten

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