



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) $\frac{6}{10} =$ _____
- 2) $29 : 4 =$ _____
- 3) $\frac{7}{29} =$ _____
- 4) $205 : 21 =$ _____
- 5) $125 : 16 =$ _____
- 6) $\frac{2}{6} =$ _____
- 7) $83 : 12 =$ _____
- 8) $\frac{9}{14} =$ _____
- 9) $\frac{2}{3} =$ _____
- 10) $\frac{6}{8} =$ _____
- 11) $\frac{8}{30} =$ _____
- 12) $75 : 11 =$ _____
- 13) $\frac{4}{20} =$ _____
- 14) $107 : 15 =$ _____
- 15) $32 : 5 =$ _____

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



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- 1) $\frac{6}{10} =$ 5
- 2) $29 : 4 =$ 2•2
- 3) $\frac{7}{29} =$ 29
- 4) $205 : 21 =$ 3•7
- 5) $125 : 16 =$ 2•2•2•2
- 6) $\frac{2}{6} =$ 3
- 7) $83 : 12 =$ 2•2•3
- 8) $\frac{9}{14} =$ 2•7
- 9) $\frac{2}{3} =$ 3
- 10) $\frac{6}{8} =$ 2•2
- 11) $\frac{8}{30} =$ 3•5
- 12) $75 : 11 =$ 11
- 13) $\frac{4}{20} =$ 5
- 14) $107 : 15 =$ 3•5
- 15) $32 : 5 =$ 5

Antworten

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