



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)  $\frac{7}{30} =$  \_\_\_\_\_
- 2)  $\frac{12}{13} =$  \_\_\_\_\_
- 3)  $182 : 25 =$  \_\_\_\_\_
- 4)  $\frac{4}{12} =$  \_\_\_\_\_
- 5)  $\frac{24}{29} =$  \_\_\_\_\_
- 6)  $201 : 22 =$  \_\_\_\_\_
- 7)  $82 : 8 =$  \_\_\_\_\_
- 8)  $\frac{2}{3} =$  \_\_\_\_\_
- 9)  $51 : 21 =$  \_\_\_\_\_
- 10)  $\frac{6}{16} =$  \_\_\_\_\_
- 11)  $255 : 26 =$  \_\_\_\_\_
- 12)  $\frac{1}{5} =$  \_\_\_\_\_
- 13)  $\frac{3}{4} =$  \_\_\_\_\_
- 14)  $148 : 15 =$  \_\_\_\_\_
- 15)  $\frac{18}{28} =$  \_\_\_\_\_

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



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- 1)  $\frac{7}{30} =$  2•3•5
- 2)  $\frac{12}{13} =$  13
- 3)  $182 : 25 =$  5•5
- 4)  $\frac{4}{12} =$  3
- 5)  $\frac{24}{29} =$  29
- 6)  $201 : 22 =$  2•11
- 7)  $82 : 8 =$  2•2
- 8)  $\frac{2}{3} =$  3
- 9)  $51 : 21 =$  7
- 10)  $\frac{6}{16} =$  2•2•2
- 11)  $255 : 26 =$  2•13
- 12)  $\frac{1}{5} =$  5
- 13)  $\frac{3}{4} =$  2•2
- 14)  $148 : 15 =$  3•5
- 15)  $\frac{18}{28} =$  2•7

**Antworten**

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