



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) $10 : 3 =$ _____

2) $\frac{1}{8} =$ _____

3) $\frac{16}{20} =$ _____

4) $102 : 19 =$ _____

5) $\frac{2}{17} =$ _____

6) $288 : 27 =$ _____

7) $\frac{11}{13} =$ _____

8) $\frac{6}{16} =$ _____

9) $196 : 30 =$ _____

10) $\frac{21}{24} =$ _____

11) $101 : 15 =$ _____

12) $243 : 26 =$ _____

13) $45 : 18 =$ _____

14) $84 : 22 =$ _____

15) $144 : 14 =$ _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____



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

1) $10 : 3 =$ 3

2) $\frac{1}{8} =$ 2•2•2

3) $\frac{16}{20} =$ 5

4) $102 : 19 =$ 19

5) $\frac{2}{17} =$ 17

6) $288 : 27 =$ 3

7) $\frac{11}{13} =$ 13

8) $\frac{6}{16} =$ 2•2•2

9) $196 : 30 =$ 3•5

10) $\frac{21}{24} =$ 2•2•2

11) $101 : 15 =$ 3•5

12) $243 : 26 =$ 2•13

13) $45 : 18 =$ 2

14) $84 : 22 =$ 11

15) $144 : 14 =$ 7

Antworten1. R2. T3. T4. R5. R6. R7. R8. T9. R10. T11. R12. R13. T14. R15. R