



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

Answers

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.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.\overline{1190476}$$

1)  $96 \div 11 =$  \_\_\_\_\_

2)  $\frac{13}{21} =$  \_\_\_\_\_

3)  $13 \div 2 =$  \_\_\_\_\_

4)  $\frac{3}{23} =$  \_\_\_\_\_

5)  $54 \div 20 =$  \_\_\_\_\_

6)  $\frac{15}{18} =$  \_\_\_\_\_

7)  $\frac{6}{14} =$  \_\_\_\_\_

8)  $150 \div 28 =$  \_\_\_\_\_

9)  $42 \div 4 =$  \_\_\_\_\_

10)  $61 \div 16 =$  \_\_\_\_\_

11)  $264 \div 25 =$  \_\_\_\_\_

12)  $61 \div 15 =$  \_\_\_\_\_

13)  $\frac{18}{24} =$  \_\_\_\_\_

14)  $41 \div 5 =$  \_\_\_\_\_

15)  $65 \div 29 =$  \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_

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14. \_\_\_\_\_

15. \_\_\_\_\_



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13)  $\frac{18}{24} = \underline{2 \times 2}$

14)  $41 \div 5 = \underline{5}$

15)  $65 \div 29 = \underline{29}$

Answers

1. R

2. R

3. T

4. R

5. T

6. R

7. R

8. R

9. T

10. T

11. T

12. R

13. T

14. T

15. R