



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.

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

1)  $\frac{7}{30} =$  \_\_\_\_\_

2)  $\frac{12}{13} =$  \_\_\_\_\_

3)  $182 \div 25 =$  \_\_\_\_\_

4)  $\frac{4}{12} =$  \_\_\_\_\_

5)  $\frac{24}{29} =$  \_\_\_\_\_

6)  $201 \div 22 =$  \_\_\_\_\_

7)  $82 \div 8 =$  \_\_\_\_\_

8)  $\frac{2}{3} =$  \_\_\_\_\_

9)  $51 \div 21 =$  \_\_\_\_\_

10)  $\frac{6}{16} =$  \_\_\_\_\_

11)  $255 \div 26 =$  \_\_\_\_\_

12)  $\frac{1}{5} =$  \_\_\_\_\_

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

14)  $148 \div 15 =$  \_\_\_\_\_

15)  $\frac{18}{28} =$  \_\_\_\_\_

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

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

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

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

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

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

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

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

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

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

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

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

13. \_\_\_\_\_

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

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



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

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.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.11\overline{90476}$$

1)  $\frac{7}{30} =$  2×3×5

2)  $\frac{12}{13} =$  13

3)  $182 \div 25 =$  5×5

4)  $\frac{4}{12} =$  3

5)  $\frac{24}{29} =$  29

6)  $201 \div 22 =$  2×11

7)  $82 \div 8 =$  2×2

8)  $\frac{2}{3} =$  3

9)  $51 \div 21 =$  7

10)  $\frac{6}{16} =$  2×2×2

11)  $255 \div 26 =$  2×13

12)  $\frac{1}{5} =$  5

13)  $\frac{3}{4} =$  2×2

14)  $148 \div 15 =$  3×5

15)  $\frac{18}{28} =$  2×7

Answers

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