



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) $158 \div 17 =$ _____

2) $213 \div 25 =$ _____

3) $119 \div 22 =$ _____

4) $\frac{8}{28} =$ _____

5) $\frac{13}{16} =$ _____

6) $\frac{1}{3} =$ _____

7) $\frac{3}{29} =$ _____

8) $\frac{6}{18} =$ _____

9) $\frac{4}{6} =$ _____

10) $\frac{12}{27} =$ _____

11) $\frac{15}{19} =$ _____

12) $\frac{7}{14} =$ _____

13) $68 \div 11 =$ _____

14) $116 \div 13 =$ _____

15) $24 \div 7 =$ _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____



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1) $158 \div 17 = \underline{17}$

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13) $68 \div 11 = \underline{11}$

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15) $24 \div 7 = \underline{7}$

Answers

1. **R**

2. **T**

3. **R**

4. **R**

5. **T**

6. **R**

7. **R**

8. **R**

9. **R**

10. **R**

11. **R**

12. **T**

13. **R**

14. **R**

15. **R**