



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) $\frac{2}{3} =$ _____
- 2) $\frac{3}{17} =$ _____
- 3) $\frac{8}{26} =$ _____
- 4) $\frac{4}{5} =$ _____
- 5) $\frac{3}{6} =$ _____
- 6) $\frac{12}{22} =$ _____
- 7) $\frac{2}{14} =$ _____
- 8) $223 \div 21 =$ _____
- 9) $\frac{1}{4} =$ _____
- 10) $234 \div 28 =$ _____
- 11) $95 \div 15 =$ _____
- 12) $112 \div 18 =$ _____
- 13) $91 \div 11 =$ _____
- 14) $155 \div 19 =$ _____
- 15) $\frac{6}{8} =$ _____

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



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Answers

- 1) $\frac{2}{3} =$ 3
- 2) $\frac{3}{17} =$ 17
- 3) $\frac{8}{26} =$ 13
- 4) $\frac{4}{5} =$ 5
- 5) $\frac{3}{6} =$ 2
- 6) $\frac{12}{22} =$ 11
- 7) $\frac{2}{14} =$ 7
- 8) $223 \div 21 =$ 3×7
- 9) $\frac{1}{4} =$ 2×2
- 10) $234 \div 28 =$ 2×7
- 11) $95 \div 15 =$ 3
- 12) $112 \div 18 =$ 3×3
- 13) $91 \div 11 =$ 11
- 14) $155 \div 19 =$ 19
- 15) $\frac{6}{8} =$ 2×2

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