



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).

$$6/40 = 3/20 = 2 \times 2 \times 5 = 0.15$$

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.

$$5/42 = 2 \times 3 \times 7 = 0.1190476$$

1) $213 \div 24 =$ _____

2) $17/19 =$ _____

3) $13 \div 2 =$ _____

4) $13/17 =$ _____

5) $13/15 =$ _____

6) $238 \div 23 =$ _____

7) $84 \div 10 =$ _____

8) $20 \div 8 =$ _____

9) $3/7 =$ _____

10) $9/12 =$ _____

11) $17/29 =$ _____

12) $77 \div 27 =$ _____

13) $3/9 =$ _____

14) $4/11 =$ _____

15) $244 \div 30 =$ _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____



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1) $213 \div 24 =$ $2 \times 2 \times 2$

2) $17/19 =$ 19

3) $13 \div 2 =$ 2

4) $13/17 =$ 17

5) $13/15 =$ 3×5

6) $238 \div 23 =$ 23

7) $84 \div 10 =$ 5

8) $20 \div 8 =$ 2

9) $3/7 =$ 7

10) $9/12 =$ 2×2

11) $17/29 =$ 29

12) $77 \div 27 =$ $3 \times 3 \times 3$

13) $3/9 =$ 3

14) $4/11 =$ 11

15) $244 \div 30 =$ 3×5

Answers

1. **T**

2. **R**

3. **T**

4. **R**

5. **R**

6. **R**

7. **T**

8. **T**

9. **R**

10. **T**

11. **R**

12. **R**

13. **R**

14. **R**

15. **R**