



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) $62 \div 20 =$ _____

2) $6/13 =$ _____

3) $1/3 =$ _____

4) $85 \div 12 =$ _____

5) $66 \div 10 =$ _____

6) $1/19 =$ _____

7) $112 \div 22 =$ _____

8) $87 \div 11 =$ _____

9) $125 \div 29 =$ _____

10) $8/17 =$ _____

11) $25/26 =$ _____

12) $4/6 =$ _____

13) $137 \div 14 =$ _____

14) $92 \div 16 =$ _____

15) $16/18 =$ _____

1. _____

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14) $92 \div 16 = \underline{2 \times 2}$

15) $16/18 = \underline{3 \times 3}$

Answers1. **T**2. **R**3. **R**4. **R**5. **T**6. **R**7. **R**8. **R**9. **R**10. **R**11. **R**12. **R**13. **R**14. **T**15. **R**