

Divisibility Rules

Chapter 6: Number Play · Topic 2

Key Concept

Divisibility rules also exist for less commonly used numbers: a number is divisible by 4 if its last two digits form a number divisible by 4; by 6 if it is divisible by both 2 and 3; by 8 if its last three digits form a number divisible by 8; and by 11 using a rule involving alternating digit sums. These rules save significant time when factoring numbers or simplifying fractions, especially with larger numbers where full division would be tedious.

Quick Revision Notes

- Divisible by 2: last digit is even. Divisible by 5: ends in 0 or 5. Divisible by 10: ends in 0.
- Divisible by 3: digit sum divisible by 3. Divisible by 9: digit sum divisible by 9.
- Divisible by 4: last two digits form a number divisible by 4.
- Divisible by 6: divisible by both 2 and 3.

Practice Questions

- 1 Check if 234 is divisible by 3.
- 2 Check if 5,624 is divisible by 4.
- 3 Explain the divisibility rule for 6 and apply it to check if 342 is divisible by 6.