## **Divisibility by:**

- 2 If the last digit is even, the number is divisible by 2.
- **3** If the sum of the digits is divisible by 3, the number is also.
- 4 If the last two digits form a number divisible by 4, the number is also.
- 5 If the last digit is a 5 or a 0, the number is divisible by 5.
- 6 If the number is divisible by both 3 and 2, it is also divisible by 6.
- 7 Take the last digit, double it, and subtract it from the rest of the number; if the answer is divisible by 7 (including 0), then the number is also.
- 8 If the last three digits form a number divisible by 8, then so is the whole number.
- 9 If the sum of the digits is divisible by 9, the number is also.
- **10** If the number ends in 0, it is divisible by 10.
- 11 Alternately add and subtract the digits from left to right. If the result (including 0) is divisible by 11, the number is also. Example: to see whether 365167484 is divisible by 11, start by subtracting: 3-6+5-1+6-7+4-8+4 = 0; therefore 365167484 is divisible by 11.
- 12 If the number is divisible by both 3 and 4, it is also divisible by 12.

Delete the last digit from the number, then subtract 9 times the deleted digit from the remaining number. If what is left is divisible by 13, then so is the original number.