Divisibility Rules Quick Reference

Number	Rule	Example
2	The digit in the ones place is 2, 4, 6, 8, or 0.	13,47**8** – yes, because the number ends with the digit 8 13,478/2 = 6,739
3	The sum of the number's digits is divisible by 3.	14,802 – yes, because 1 + 4 + 8 + 0 + 2 = 15 which is divisible by 3 14,802/3 = 4,934
4	As a number, the last two digits are divisible by 4.	20,0**32** – yes, because 32 is divisible by 4 20, 032/4 = 5,008
5	The number ends in a 5 or 0.	33,67**0** – yes, because the number ends in a 0. 33,670/5 = 6,734 30,67**5** – yes, because the number ends in a 5. 30,675/5 = 6,135
6	The number is divisible by both 2 and 3.	5,93**4** – yes, because the number ends with the digit 4 which is divisible by 2 and because 5 + 9 + 3 + 4 = 21 which is divisible by 3
7	When you double the last digit and subtract it from the rest of the number, your answer is 0 or divisible by 7. You can repeat this process with each resulting number if it is also too large to determine.	3,941 – yes, because 1 doubled is 2 and 394 – 2 = 392; 2 doubled is 4 and 39 – 4 is 35 which is divisible by 7 3,941/7 = 563
8	As a number, the last three digits are divisible by 8.	44,120 – yes, because 120 is divisible by 8; 120/8 = 15 44,120/8 = 5,515

Number	Rule	Example
9	The sum of the number's digits is divisible by 9.	45, 279 – yes, because 4 + 5 + 2 + 7 + 9 = 27 which is divisible by 9 45,279/9 = 5,031
10	The digit in the ones place is 0.	67,67**0** – yes, because the number ends in a 0. 67,670/10 = 6,767
11	When you sum every second digit and subtract all other digits, your answer is 0 or divisible by 11.	2**9**1,**8**1**9** – yes, because 9 + 8 + 9 = 26 and 26 – 2 – 1 – 1 = 22 which is divisible by 11 291,819/11 = 26,529
12	The number is divisible by both 3 and 4.	7,9**32** – yes, because 7 + 9 + 3 + 2 = 21 which is divisible by 3 and the last two digits as a number, 32, is divisible by 4 7,932/12 = 661