

## Divisibility Rules

A number is divisible by:	If...	Example
<b>2</b>	The last digit is even (0,2,4,6,8)	5,734,128 <b>Yes</b> 62,409 <b>No</b>
<b>3</b>	The sum of the digits is divisible by 3	381 (3+8+1=12) <b>Yes</b> 2,107 (2+1+0+7=10) <b>No</b>
<b>4</b>	The last 2 digits are divisible by 4	51,312 <b>Yes</b> 7,019 <b>No</b>
<b>5</b>	The last digit is 0 or 5	3,175 <b>Yes</b> 52,809 <b>No</b>
<b>6</b>	it is divisible by 2 <i>and</i> divisible by 3.	114 (it is even, and 1+1+4=6) <b>Yes</b> 308 (it is even, but 3+0+8=11) <b>No</b>
<b>7</b>	You double the last digit, then subtract it from the remaining digits of the number and the answer is: <b>0</b> , or a <b>multiple of 7</b>	672 (Double 2 is 4, 67-4=63) <b>Yes</b> 905 (Double 5 is 10, 90-10=80) <b>No</b>
<b>8</b>	The last three digits are divisible by 8	109,816 (816÷8=102) <b>Yes</b> 8,216,302 (302÷8=37 <sup>3</sup> / <sub>4</sub> ) <b>No</b>
<b>9</b>	The sum of the digits is divisible by 9	1,629 (1+6+2+9=18) <b>Yes</b> 52,013 (5+2+0+1+3=11) <b>No</b>
<b>10</b>	The number ends in 0	53,220 <b>Yes</b> 634,221 <b>No</b>
<b>11</b>	If you alternately subtract and add all of the digits from left to right and the answer is: <b>0</b> , or a <b>multiple of 11</b>	1364 (1-3+6-4 = 0) <b>Yes</b> 64812 (6-4+8-1+2 = 11) <b>Yes</b> 632 (6-3+2 = 5) <b>No</b>
<b>12</b>	The number is divisible by both 3 <i>and</i> 4	648 (6+4+8=18) <b>Yes</b> 916 (9+1+6=16) <b>No</b>

### First 25 Prime Numbers (Primes under 100)

2	13	31	53	73
3	17	37	59	79
5	19	41	61	83
7	23	43	67	89
11	29	47	71	97

