

### Divisibility Rules

Divisor	Divisibility Condition	Example
2	The last digit is even (0, 2, 4, 6, 8)	38: 8 is even which is divisible by 2
3	The sum of the digits is divisible by 3. For large numbers, digits may be summed iteratively.	4,053 $\rightarrow 4+0+5+3=12$ and $1+2=3$ which is clearly divisible by 3.
5	The last digit is 0 or 5.	1,285: the last digit is 5
6	It is divisible by 2 AND 3	2,562: $2+5+6+2=15$ , which is divisible by 3; the last digit is even which is divisible by 2. Therefore the number is divisible by 6
9	The sum of the digits is divisible by 9. For large numbers, digits may be summed iteratively.	1,269: $1+2+6+9=18$ and $1+8=9$ which is clearly divisible by 9.
10	The last digit is 0.	623,720: the last digit is 0.

		digit sum	2	3	5	6	9	10
1	20	2	✓		✓			✓
2	96							
3	78							
4	117							
5	550							
6	858							
7	1734							
8	3456							
9	4077							
10	6138							

Use these websites for help with divisibility

[http://www.helpingwithmath.com/by\\_subject/division/div\\_divisibility\\_rules.htm#rule2](http://www.helpingwithmath.com/by_subject/division/div_divisibility_rules.htm#rule2)

<http://www.vectorkids.com/vkdivisible.htm>

# Divisibility WS

Name: \_\_\_\_\_

		digit sum	2	3	5	6	9	10
1	20	2	✓		✓			✓
2	34							
3	36							
4	42							
5	43							
6	55							
7	58							
8	59							
9	75							
10	79							
11	81							
12	93							
13	140							
14	205							
15	233							
16	306							
17	363							
18	435							
19	524							
20	605							
21	1008							
22	1074							
23	1140							
24	1153							
25	1620							
26	1809							
27	2633							
28	2850							
29	3300							
30	3945							