

## **DIVISIBILITY RULES 1-10 CHART**

EVEN NUMBERS	ODD NUMBERS	DIVISIBLE BY 1	DIVISIBLE BY 2
All integers where the last digit ends in 0, 2, 4, 6 or 8.	All integers where the last digit ends in 1, 3, 5, 7 or 9.	All integers are divisible by 1.	All <b>even</b> integers are divisible by 2.
328 is even as the last digit is 8. 1314 is even as the last digit is 4.	1907 is odd as the last digit is 7. 2403 is odd as the last digit is 3.	147 is divisible by 1. 12.8 is not divisible by 1 because it is not an integer.	318 <b>is divisible</b> by 2 because the last digit is 8 which is even. 513 <b>is not divisible</b> by 2 because it is an odd number.
DIVISIBLE BY 3	DIVISIBLE BY 4	DIVISIBLE BY 5	DIVISIBLE BY 6
All integers where the total of the digits is divisible by 3 (in the 3 times table).	All <b>even</b> integers whose last two digits are divisible by 4.	All integers whose last digit is a 0 or 5.	All <b>even</b> integers which are divisible by 3 (see Divisible by 3 test).
714 is divisible by 3 because 7+1+4=12 and 12÷3=4 (divisible). 3515 is not divisible by 3 because 3+5+1+5=14 and $14\div3=4^2/_3$ (not divisible).	1328 <b>is divisible</b> by 4 because 28÷4=7. 870 <b>is not divisible</b> by 4 because 70÷4=17 ½. 793 <b>is not divisible</b> by 4 because it is odd.	4185 <b>is divisible</b> by 5 because the last digit is 5. 319 <b>is not divisible</b> by 5 because the last digit is 9.	432 is divisible by 3 because it is even and the total of the digits is $4+3+2=9$ and $9\div3=3$ (divisible). 158 is not divisible by 3 because $1+5+8=14$ and $14\div3=4^2/_3$ (not divisible).
DIVISIBLE BY 7	DIVISIBLE BY 8	DIVISIBLE BY 9	DIVISIBLE BY 10
Double the last digit and subtract the result from the number made by the other digits and see if it is divisible by 7. Repeat again if needed.	All <b>even</b> integers where the last 3 digits are divisible by 8.	All integers where the total of the digits is divisible by 9 (in the 9 times tables).	All integers whose last digit is 0.
1057 <b>is divisible</b> by 7 because 105-2x7=91. 91÷7=13 (divisible). 841 <b>is not divisible</b> by 7 because 84–2x1=82. 82÷7=11 <sup>5</sup> / <sub>7</sub> (not divisible).	5312 <b>is divisible</b> by 8 because 312÷8=39. 1207 <b>is not divisible</b> by 8 because it is odd. 4286 <b>is not divisible</b> by 8 because 286÷8=35 ¾.	2745 <b>is divisible</b> by 9 because 2+7+4+5=18 which is divisible by 9. 702 <b>is divisible</b> by 9 because 7+0+2=9 which is divisible by 9. 1024 <b>is not divisible</b> by 9 because 1+0+2+4=7 which is not divisible by 9.	5120 <b>is divisible</b> by 10 because the last digit is 0. 8039 <b>is not divisible</b> by 10 because the last digit is 9. 2815 <b>is not divisible</b> by 10 because the last digit is 5.

An **integer** is whole number which can be positive or negative.





0 is **divisible** by any number except itself.

