

DIVISIBILITY RULES

How can I find the factors of a number?

	IT IS A FACTOR IF...	EXAMPLES OF WHEN IT IS A FACTOR:
1	1 is a factor of <u>every</u> number.	Every. Single. Time. Write it down <u>immediately</u> .
2	If the number is <u>even</u> (ends in 0,2,4,6,8)	12 21 <u>6</u> 50 34 3 <u>6</u>
3	Add the digits together. Do they equal a number that 3 goes into evenly?	42 $4+2=6$ Does 3 go into 6 evenly? Yes, so 3 is a factor of 42.
4	Look at the last 2 digits. Does 4 go into them evenly?	124 Does 4 go into 24 evenly? Yes, so it also goes into 124 evenly.
5	If the number ends in a 0 or a 5	14 <u>5</u> 90 6 <u>5</u> 1,3 <u>60</u>
6	2 and 3 <u>both</u> go into it evenly	36 check it using the rules for 2 and 3
7	skip count by 7's to see.	7, 14, 21, 28, 35 ...
8	skip count by 8's to see	8, 16, 24, 32, 40 ...
9	Add the digits together. Does 9 go into it evenly?	126 $1+2+6=9$ Does 9 go into 9? Yes
10	Ends in a 0	30 340 50 180

PRACTICE USING DIVISIBILITY RULES:

Is 2 a factor? Circle the numbers that 2 goes into evenly.

12 25 38 106 113 247 570 378

Is 3 a factor? Circle the numbers that 3 goes into evenly.

72 13 38 54 73 84 105 93

Is 5 a factor? Circle the numbers that 5 goes into evenly.

75 36 190 165 72 45 370 85

Is 10 a factor? Circle the numbers that 10 goes into evenly.

308 50 240 99 81 60 409 75 130