Name _____ Hour _____

4.1 Divisibility Rules Notes

Number	Divisibility Rule	Example
Two (2)	A number is divisible by two if it is **even**. Another way to say a word is even is to say it ends in 0, 2, 4, 6 or 8.	642 is divisible by two because it ends in a two, which makes it an even number
Three (3)	A number is divisible by three if the **sum of the digits adds up to a multiple of three.**	423 is divisible by three because 4 + 2 + 3 = 9. Since nine is a multiple of three (or is divisible by three), then 423 is divisible by three
Four (4)	A number is divisible by four if it is even and **can be divided by two twice.**	128 is divisible by four because half of it is 64 and 64 is still divisible by two
Five (5)	A number is divisible by five if it **ends in a five or a zero.**	435 is divisible by five because it ends in a five
Six (6)	A number is divisible by six if it is **divisible by both two and three.**	222 is divisible by six because it is even, so it is divisible by two and its digits add up to six, which makes it divisible by three
Nine (9)	A number is divisible by nine if the **sum of the digits adds up to a multiple of nine**. This rule is similar to the divisibility rule for three.	9243 is divisible by nine because the sum of the digits adds up to eighteen, which is a multiple of nine
Ten (10)	A number is divisible by ten if it **ends in a zero**. This rule is similar to the divisibility rule for five.	730 is divisible by ten because it ends in zero

Divisibility Rules Practice Problems

Use the divisibility rules to circle the answers.

Number	Divisible By:						
Example: 10	(2)	3	4	(5)	6	9	(10)
15	2	3	4	5	6	9	10
27	2	3	4	5	6	9	10
36	2	3	4	5	6	9	10
16	2	3	4	5	6	9	10
28	2	3	4	5	6	9	10
57	2	3	4	5	6	9	10
102	2	3	4	5	6	9	10
268	2	3	4	5	6	9	10
4518	2	3	4	5	6	9	10
93	2	3	4	5	6	9	10
144	2	3	4	5	6	9	10
256	2	3	4	5	6	9	10
75	2	3	4	5	6	9	10
450	2	3	4	5	6	9	10
70	2	3	4	5	6	9	10