## Divisibility Rules

"divisible" means a number is able to be divided evenly with another number with NO remainders!

| A number is divisible by... | Definition | Example |
| :---: | :---: | :---: |
| 2 | The last digit is an even number. | $2,458$ <br> 8 is divisible by 2 |
| 3 | The sum of the digits is divisible by 3. | $\begin{gathered} 123 \\ 1+2+3=6 \end{gathered}$ <br> 6 is divisible by 3 |
| 4 | The last two digit form a number that is divisible by 4. | $4,524$ <br> 24 is divisible by 4 |
| 5 | The last digit is either a 5 or a 0 (zero). | $12,390 \text { or } 3,475$ <br> both 0 and 5 are divisible by 5 |
| 6 | The number is divisible by BOTH 2 and 3. | $24$ <br> 24 is divisible by BOTH 2 and 3 |
| 7 | You can double the last digit and subtract the sum from the rest of the number, and set an answer that is divisible by 7 . | $\begin{gathered} 672 \\ 2+2=4 \\ 67-4=63 \end{gathered}$ <br> 63 is divisible by 7 |
| 8 | The last three digits from the a number that is divisible by 8. | $1,816$ <br> 816 is divisible by 8 |
| 9 | The sum of all the digits is divisible by 9. | $\begin{gathered} 153 \\ 1+5+3=9 \end{gathered}$ <br> 9 is divisible by 9 |
| 10 | The number ends in a 0 (zero). | $\begin{gathered} 257,890 \\ 0 \text { (zero) is divisible by } \\ 10 \end{gathered}$ |

