

### **Numbers Divisible by 2**

**Numbers are divisible by 2 if the ones digit is evenly divisible by 2. This means that even numbers are divisible by 2.**

### **Numbers Divisible by 3**

**Numbers are divisible by 3 if the sum of all the individual digits is evenly divisible by 3. For example, the sum of the digits for the number 3627 is 18, which is evenly divisible by 3 so the number 3627 is evenly divisible by 3.**

### **Numbers Divisible by 4**

**Whole numbers are divisible by 4 if the number formed by the last two individual digits is evenly divisible by 4. For example, the number formed by the last two digits of the number 3628 is 28, which is evenly divisible by 4 so the number 3628 is evenly divisible by 4.**

**Why is this always true?**

### **Numbers Divisible by 5**

**Numbers are evenly divisible by 5 if the last digit of the number is 0 or 5**

### **Numbers Divisible by 6**

**Numbers are evenly divisible by 6 if they are evenly divisible by both 2 AND 3. Even numbers are always evenly divisible by 2. Numbers are evenly divisible by 3 if the sum of all the individual digits is evenly divisible by 3. For example, the sum of the digits for the number 3627 is 18, which is evenly divisible by 3 but 3627 is an odd number so the number 3627 is not evenly divisible by 6.**

## Numbers Divisible by 7

To determine if a number is divisible by 7, take the last digit off the number, double it and subtract the doubled number from the remaining number. If the result is evenly divisible by 7 (e.g. 14, 7, 0, -7, etc.), then the number is divisible by seven. This may need to be repeated several times.

**Example: Is 3101 evenly divisible by 7?**

310 - take off the last digit of the number which was 1  
-2 - double the removed digit and subtract it  
308 - repeat the process by taking off the 8  
-16 - and doubling it to get 16 which is subtracted  
14 - the result is 14 which is a multiple of 7

## Numbers Divisible by 8

Numbers are divisible by 8 if the number formed by the last three individual digits is evenly divisible by 8. For example, the last three digits of the number 3624 is 624, which is evenly divisible by 8 so 3624 is evenly divisible by 8.

## Numbers Divisible by 9

Numbers are divisible by 9 if the sum of all the individual digits is evenly divisible by 9. For example, the last sum of the digits of the number 3627 is 18, which is evenly divisible by 9 so 3627 is evenly divisible by 9.

## Numbers Divisible by 10

A number is divisible by 10 only if the last digit is a 0.