Name: $\qquad$ Date: $\qquad$
Tests for Divisibility of Numbers
Q1. Which of the following numbers is divisible by $\mathbf{5 ?}$
Sol.
a. 10050
b. 12305

Q2. Is the number $\mathbf{4 3 2 6}$ divisible by 6 ?
Sol.

Q3. Is $\mathbf{5 6 4 2}$ divisible by $\mathbf{7 ?}$
Sol.

## Tests for Divisibility of Numbers

## Q1. Which of the following numbers is divisible by $\mathbf{5}$ ?

Sol.
a. 10050
b. 12305

Rule: A number which has either 0 or 5 in its ones place is divisible by 5 . a. $\mathbf{1 0 0 5 0}$ - Here last digit of the number is 0 . So, the number 10050 is divisible by 5 .
b. $\mathbf{1 2 3 0 6}$ - Here last digit of the number is 6 . So, the number 112306 is not divisible by 5 .

## Q2. Is the number 4326 divisible by $\mathbf{6 ?}$

Sol. Rule: If a number is divisible by 2 and 3 both then it is divisible by 6 also.

4326
i. Number 4326 end in even number (i.e. 6). So, 4326 is divisible by 2.
ii. Sum of the digit of the given number $4326=4+3+2+6=15$. Number ' 15 ' is divisible by 3 . So, 4326 is divisible by 3.
Given number 4326 is divisible by 2 as well as by 3 . So, 4326 is divisible by 6 .

## Q3. Is 5642 divisible by $\mathbf{7 ?}$

Sol. Rule: Double the last number of the given number and then subtract it from the rest of the number left in the given number. If the answer we get is either 0 or any number divisible by 7 , then the given number is divisible by 7 .
Step1: Double the last digit
Here last digit is 2 . Double of 2 is 4 .
Step2: Subtract the answer from the rest of the number.
Number left is 564 . So, subtract 4 from 564.
$564-4=560$
Step3: Number 560 is divisible by 7 . So, 5642 is divisible by 7

