

6th – Playing with Numbers II

Divisibility Rules:

Divisible by 2: A number is divisible by 2, if its unit digit is 0 or divisible by 2 i.e., 2, 4, 6, 8

Divisible by 3: A number is divisible by 3, if the sum of its digits is divisible by 3.

Divisible by 4: A number is divisible by 4, if the last two digits are divisible by 4.

Divisible by 5: A number is divisible by 5, if the digit in its units place is 5 or zero.

Divisible by 6: A number is divisible by 2 and 3 both.

Divisible by 8: A number is divisible by 8, if the last three digits are divisible by 8.

Divisible by 9: A number is divisible by 9, if the sum of its digits is divisible by 9.

Divisible by 10: If number is divisible by 10, if the digit at unit's place is zero.

Divisible by 11: A number is divisible by 11, if the difference between the sum of its digits at odd places and the sum at even places is either exactly divisible by 0 or 11.

Exercise:

- Using divisibility tests, determine whether 1258 is divisible by 6 or not.
- Check whether the following numbers are divisible by 2 or not. Give reasons also:
a) 456 b) 68 c) 255 d) 207 e) 680 f) 244
- Check whether the following numbers are divisible by 3 or not. Give reasons also:
a) 405 b) 381 c) 928 d) 207 e) 4616 f) 245
- Check whether the following numbers are divisible by 4 or not. Give reasons also:
a) 348 b) 27616 c) 8514 d) 722 e) 1200 f) 1244
- Check whether the following numbers are divisible by 5 or not. Give reasons also:
a) 3425 b) 750 c) 2551 d) 855 e) 394 f) 3885
- Check whether the following numbers are divisible by 6 or not. Give reasons also:
a) 5106 b) 6833 c) 636 d) 5912 e) 680 f) 508
- Check whether the following numbers are divisible by 9 or not. Give reasons also:
a) 7686 b) 608 c) 252 d) 883 e) 5105 f) 7999
- Check whether the following numbers are divisible by 10 or not. Give reasons also:
a) 4560 b) 6118 c) 2550 d) 2071 e) 680 f) 2404
- Check whether the following numbers are divisible by 11 or not. Give reasons also:
a) 10824 b) 98777 c) 70169308 d) 1000001 e) 901154 f) 624679
- Is 3110, 2222, 5974, 4356 and 1468 divisible by 2?
- Is 7221 divisible by 3?
- Find the smallest digit and the greatest digit in the blank space of the number so that the number formed is divisible by 3. ____ 854
- Is 4624 divisible by 4?
- Is the number 73512 divisible by 8?
- Is 3729 divisible by 11?
- Check whether 2396 is divisible by 2 ?
- Check whether 23973 is divisible by 3 ?
- Check whether 23924 is divisible by 4 ?
- Check whether 23920 is divisible by 5 ?
- Check whether 23724 is divisible by 6 ?
- Check whether 950720 is divisible by 8 ?
- Check whether 24597 is divisible by 9 ?
- Write the smallest digit and the greatest digit in the blank space of each of the following numbers so that the number formed is divisible by 3:
a) ____ 6724 b) 4765 ____ 2
- Find the value of x when: $923x985$ is divisible by 11.

