Maths (Playing with Number)

Exercise 5(C) Home work

1. Find which of the following numbers are divisible by 2:

(i) 192

Ans) Unit digit of 192 = 2

∴ 2 is a even number.

So, the number 192 is divisible by 2.

(ii) 1660

Ans) Unit digit = 0

∴ 0 is divisible by 2.

So, the number 1660 is divisible by 2.

(iii) 1101

Ans) Unit digit = 1

∴ 1 is an odd number.

So, the number 1101 cannot be divisible by 2.

(iv) 2079

Ans) Unit digit = 9

∴ 9 is an odd number.

So, ~~that~~ the number 2079 cannot be divisible by 2.

2. Find which of the following numbers are divisible by 3:

i) 261

Ans) Sum of the digits = 2+6+1 = 9

∴ 9 is divisible by 3 ⇒ The number 261 is divisible by 3.

ii) 777

Ans) Sum of the digits = 7+7+7 = 21

∴ 21 is divisible by 3 ⇒ The number 777 is divisible by 3.

iii) 6657

Ans) Sum of the digits = 6+6+5+7 = 24

∴ 24 is divisible by 3 ⇒ The number 6657 is divisible by 3.

iv) 2574

Ans) Sum of the digits = 2+5+7+4 = 18

∴ 18 is divisible by 3 ⇒ The number 2574 is divisible by 3.

3. Find which of the following numbers are divisible by 4:

i) 360

Ans) ∴ 60 is divisible by 4 ⇒ 360 is divisible by 4.

ii) 3180

Ans) ∴ 80 is divisible by 4 ⇒ 3180 is divisible by 4.

iii) 5348

Ans) ∴ 48 is divisible by 4 ⇒ 5348 is divisible by 4.

iv) 7756

Ans) ∴ 56 is divisible by 4 ⇒ 7756 is divisible by 4.

4. Find which of the following numbers are divisible by 5:

i) 3250

Ans) Unit digit = 0

∴ 0 is divisible by 5 ⇒ The number 3250 is divisible 5.

ii) 5557

Ans Unit digit = 7

∴ 7 is not divisible by 5 ⇒ The number 5557 is not divisible by 5.

iii) 39255

Ans Unit digit = 5

∴ 5 is divisible by 5 ⇒ The number 39255 is divisible by 5.

iv) 8204

Ans Unit digit = 4

∴ 4 is not divisible by 5 ⇒ The number 8204 is not divisible by 5.

5. Find which of the following numbers are divisible by 10:

i) 5100

Ans Unit digit = 0

∴ 0 is divisible by 10 ⇒ 5100 is divisible by 10

ii) 4612

Ans) Unit digit = 2

∴ 2 is not divisible by 10 ⇒ 4612 is not divisible by 10.

iii) 3400
Ans) Unit digit = 0

∴ 0 is divisible by 10 ⇒ 3400 is divisible by 10.

iv) 8399
Ans) Unit digit = 9

∴ 9 is not divisible by 10 ⇒ 8399 is divisible by 10.

6. Find which of the following numbers are divisible by 11:
i) 2563
Ans) Sum of odd digits = 3 + 5 = 8

Sum of even digits = 6 + 2 = 8

Difference between these two sum = 8 − 8 = 0 ⇒ 2563 is divisible by 11.

ii) 8307

Ans) Sum of odd digits = 7+3 = 10

Sum of even digits = 0+8 = 8

Difference between these two sum = 10-8 = 2
∴ 8307 is not divisible by 11.

iii) 95,635
Ans) Sum of odd digits = 5+6+9 = 20

Sum of even digits = 3+5 = 8

Difference between these two sum = 20-8 = 12
∴ 95 635 is not divisible by 11.