

Exercise - 5(c)

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

- (i) 192 = ~~Here~~ ^{Here}, ~~units~~ ^{the} digit is 2. So, it is divisible by 2.
- (ii) 1660 A number having its unit digit 2, 4, 6, 8 or 0 is divisible by 2. So, 1660 is divisible by 2.
- (iii) 1101
- (iv) 2079
- Numbers 192 and 1660 are all divisible by 2.

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

- (i) 261 (ii) 111 (iii) 6657 (iv) 2574

A number divisible by 3 if the sum of all digits is divisible by 3. So, all the given numbers are divisible by 3.

- (i) $261 = 2 + 6 + 1 = 9$ is divisible by 3.
- (ii) $111 = 1 + 1 + 1 = 3$ is divisible by 3.
- (iii) $6657 = 6 + 6 + 5 + 7 = 24$ is divisible by 3.
- (iv) $2574 = 2 + 5 + 7 + 4 = 18$ is divisible by 3.

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

- (i) 960 (ii) 3180 (iii) 5348 (iv) 7756

A number is divisible by 4 if the number formed by last two digits is divisible by 4. So, all the given numbers are divisible by 4.

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

(i) 3250 (ii) 5557 (iii) 39255 (iv) 8204

A number divisible by 5 if its unit digit is 0 and 5. So, 3250 and 39255 is divisible by 5.

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

(i) 5100 (ii) 4612 (iii) 3400 (iv) 8399

A number divisible by 10 if its unit digit is zero. So, 5100 and 3400 is divisible by 10.

6. Find which of the following numbers are divisible by 11:

(i) 2563 (ii) 8307 (iii) 95635

A number is divisible by 11, if the difference between the sum of even places and sum of digits in odd places is either 0 or divisible by 11.

$$\begin{aligned} \text{(i)} \quad \overbrace{2563}^{\text{odd}} &= 2+6-5+3 \\ &= 8-8 \\ &= 0 \text{ Yes} \end{aligned}$$

Yes it is divisible by 11.

$$\begin{aligned} \text{(ii)} \quad 8307 &= 8+0-3+7 \\ &= 8-10 \\ &= -2 \end{aligned}$$

Not divisible by 11.

$$\begin{aligned} \text{(iii)} \quad 95635 &= 9+3+5-5+3 \\ &= 17-8 \\ &= 9 \end{aligned}$$

Not divisible by 11.