

St. Andrews Scots School

Adjacent Navniti Apartments
I.P Extension, Patparganj, Delhi – 110092
Session: 2026-2027

Class: V

Subject: Mathematics

Unit 4 - Factors and Multiples

Work to be done:

Ex-4 A: Q1 – i, iii, v, vii in Notebook.

Ex-4 B: Q1 , Q3 ,Q4 in Notebook.

Q6– (b, d, e)in Notebook.

Q7 – (a, b, c) in Notebook.

Q9 – (a, b, e) in Notebook.

Q10 – (a, d, e) in Notebook.

Q11 – (b, c) in Notebook.

Q12 – (a ,b, e ,f) in Notebook.

Q13 – (b ,c ,d, e) in Notebook.

Q14 – (d ,e) in Notebook.

Q15– (a, e) in Notebook.

Q16 – (b, d) in Notebook.

Q17 – (a) in Notebook.

Q18 –(b) in Notebook.

Ex-4 C: Q1– (b, c) in Notebook.

Q3 , Q5 in Notebook.

Ex-4 D: Q1 – (i, ii ,vii, viii) in Notebook.

Q2 in Book.

Review time

Worksheet

Chapter 4: Factors and Multiples

Exercise 4A

1. (i) $1 \times 12 = 12$
 $2 \times 6 = 12$
 $3 \times 4 = 12$
 Factors $\rightarrow 1, 2, 3, 4, 6, 12$
 Multiples $\rightarrow 12$
- (ii) $1 \times 35 = 35$
 $5 \times 7 = 35$
 Factors $\rightarrow 1, 5, 7, 35$
 Multiples $\rightarrow 35$
- (iii) $1 \times 21 = 21$
 $3 \times 7 = 21$
 Factors $\rightarrow 1, 3, 7, 21$
 Multiples $\rightarrow 21$
- (iv) $1 \times 58 = 58$
 $2 \times 29 = 58$
 Factors $\rightarrow 1, 2, 29, 58$
 Factors $\rightarrow 58$
- (v) $1 \times 46 = 46$
 $2 \times 23 = 46$
 Factors $\rightarrow 1, 2, 23, 46$
 Multiples $\rightarrow 46$
- (vi) $1 \times 15 = 15$
 $3 \times 5 = 15$
 Factors $\rightarrow 1, 3, 5, 15$
 Multiples $\rightarrow 15$
- (vii) $1 \times 53 = 53$
 Factors $\rightarrow 1, 53$
 Multiples $\rightarrow 53$
- (viii) $1 \times 39 = 39$
 $3 \times 13 = 39$
 Factors $\rightarrow 1, 3, 13, 39$
 Factors $\rightarrow 39$

Exercise 4B

1. Prime numbers: 3, 7, 29, 61, 73, 89, 97
2. 53, 59, 61, 67, 71, 73, 79, 83, 89, 97
3. 41 and 43
4. (2, 3), (3, 5), (5, 7), (7, 11), (11, 13)... so on
5. 90, 91, 92, 93, 94, 95 and 96

6. (a) 900

$$\begin{array}{r|l}
 2 & 900 \\
 \hline
 2 & 450 \\
 \hline
 3 & 225 \\
 \hline
 3 & 75 \\
 \hline
 5 & 25 \\
 \hline
 5 & 5 \\
 \hline
 & 1
 \end{array}$$

$$900 = 2 \times 2 \times 3 \times 3 \times 5 \times 5$$

- (b) 216

$$\begin{array}{r|l}
 2 & 216 \\
 \hline
 2 & 108 \\
 \hline
 2 & 54 \\
 \hline
 3 & 27 \\
 \hline
 3 & 9 \\
 \hline
 3 & 3 \\
 \hline
 & 1
 \end{array}$$

$$216 = 2 \times 2 \times 2 \times 3 \times 3 \times 3$$

(c) 728

2	728
2	364
2	182
7	91
13	13
	1

$$728 = 2 \times 2 \times 2 \times 7 \times 13$$

(d) 450

2	450
3	225
3	75
5	25
5	5
	1

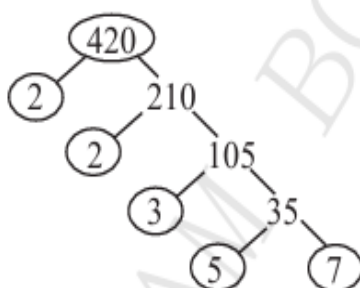
$$450 = 2 \times 3 \times 3 \times 5 \times 5$$

(e) 432

2	432
2	216
2	108
2	54
3	27
3	9
3	3
	1

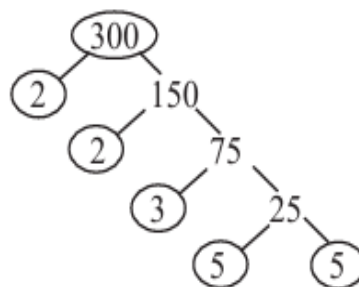
$$432 = 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 3$$

7. (a)



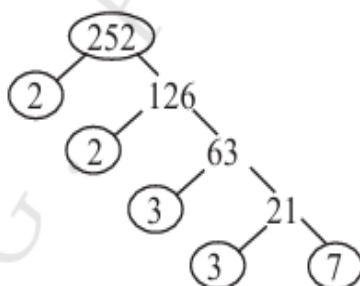
$$420 = 2 \times 2 \times 3 \times 5 \times 7$$

(b)



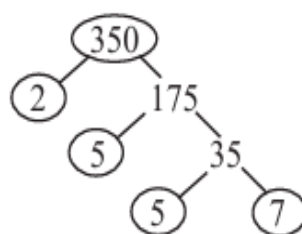
$$300 = 2 \times 2 \times 3 \times 5 \times 5$$

(c)

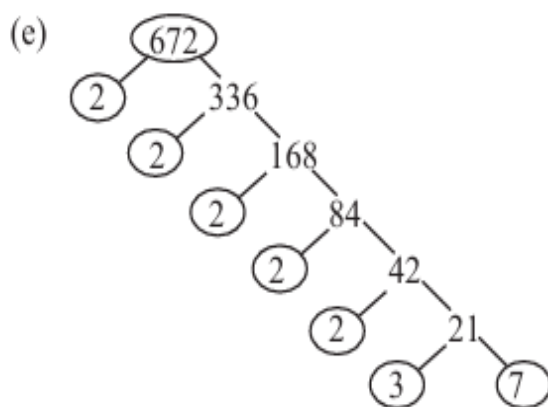


$$252 = 2 \times 2 \times 3 \times 3 \times 7$$

(d)



$$350 = 2 \times 5 \times 5 \times 7$$



$$672 = 2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 7$$

8. (a) 4 (b) 2 (c) 2 (d) 97 (e) 1

9. (a) 7, 14, 21, 28 and 35 (b) 13, 26, 39, 52 and 65
 (c) 19, 38, 57, 76 and 95 (d) 23, 46, 69, 92 and 115
 (e) 32, 64, 96, 128 and 160

10. (a) Factors of 20 are 1, 2, 4, 5, 10 and 20.
 (b) Factors of 45 are 1, 3, 5, 9, 15 and 45.
 (c) Factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18 and 36.
 (d) Factors of 63 are 1, 3, 7, 9, 21 and 63.
 (e) Factors of 54 are 1, 2, 3, 6, 9, 18, 27 and 54.

11. (a) 26412

Its ones digit is 2, so it is divisible by 2.

Now, $2 + 6 + 4 + 1 + 2 = 15$, which is divisible by 3. So, the given number is also divisible by 3.

The given number is divisible by 2 and 3. So, it is also divisible by 6.

- (b) 8316

Its ones digit is 6. So it is divisible by 2.

Now, $8 + 3 + 1 + 6 = 18$, which is divisible by 3. So, the given number is also divisible by 3.

The given number is divisible by 2 and 3. So, it is also divisible by 6.

- (c) 17703

Its ones digit is 3. So, it is not divisible by 2. $1 + 7 + 7 + 0 + 3 = 18$, which is divisible by 3. The given number is not divisible by 2. So, it is not divisible by 6.

- (d) 23758

Its ones digit is 8. So, the given number is divisible by 2. $2 + 3 + 7 + 5 + 8 = 25$, which is not divisible by 3. So, the given number is not divisible by 3.

Since, the given number is not divisible by 2 and 3.

Thus, it is also not divisible by 6.

12. (a) 34156

The digits at tens and ones place is 56 which is divisible by 4. So the given number is divisible by 4.

The last three digits (hundreds, tens, ones) are 156 which is not divisible by 8. So the given number is not divisible by 8.

(b) 82083

The last two digits are 83 which is not divisible by 4. So the number is not divisible by 4.

The last three digits are 083 which is not divisible by 8. So the given number is not divisible by 8 also.

(c) 90432

The last two digits 32 is divisible by 4. So the given number is divisible by 4.

The last three digits 432 is divisible by 8. So the given number is also divisible by 8.

(d) 10568

The last two digits 68 is divisible by 4. So the given number is divisible by 4.

The last three digits 568 is divisible by 8. So the given number is divisible by 8.

(e) 63152

The last two digits 52 is divisible by 4. So the given number is divisible by 4.

The last three digits 152 is divisible by 8. So the given number is also divisible by 8.

(f) 796504

The last two digits 04 is divisible by 4. So the given number is also divisible by 4.

The last three digits 504 is divisible by 8. So the given number is divisible by 8.

(g) 97312

The last two digits 12 is divisible by 4. So the given number is divisible by 4.

The last three digits 312 is divisible by 8. So the given number is divisible by 8 also.



(h) 69704

The last two digits 04 is divisible by 4. So the given number is divisible by 4.

The last three digits 704 is divisible by 8. So the given number is also divisible by 8.

13. (a) 6251

$625 - (1 \times 2) = 625 - 2 = 623$, which is divisible by 7.

Thus, 6251 is divisible by 7.

(b) 8036

$803 - (6 \times 2) = 803 - 12 = 791$, which is divisible by 7.

Thus, 8036 is divisible by 7.

(c) 39886

$3988 - (6 \times 2) = 3988 - 12 = 3976$, which is divisible by 7.

Thus, 39886 is also divisible by 7.

(d) 32556

$3255 - (6 \times 2) = 3255 - 12 = 3243$, which is not divisible by 7.

Thus, 32556 is not divisible by 7.

(e) 90381

$9038 - (1 \times 2) = 9038 - 2 = 9036$, which is not divisible by 7.

So, 90381 is not divisible by 7.

(f) 6741

$674 - (1 \times 2) = 674 - 2 = 672$, which is divisible by 7.

So, 6741 is divisible by 7.

(g) 7833

$783 - (3 \times 2) = 783 - 6 = 777$, which is divisible by 7.

So, 7833 is divisible by 7.

(h) 67578

$6757 - (8 \times 2) = 6757 - 16 = 6741$, which is divisible by 7.

So, 67578 is divisible by 7.

14. (a) 30627

$3 + 0 + 6 + 2 + 7 = 18$, which is divisible by 9.

So, 30627 is divisible by 9.

(b) 8146

$8 + 1 + 4 + 6 = 19$, which is not divisible by 9.

So, 8146 is not divisible by 9.

(c) 50211

$5 + 0 + 2 + 1 + 1 = 9$, which is divisible by 9.

So, 50211 is divisible by 9.

(d) 5079
 $5 + 0 + 7 + 9 = 21$, which is not divisible by 9.
So, 5079 is not divisible by 9.

(e) 96201
 $9 + 6 + 2 + 0 + 1 = 18$, which is divisible by 9.
So, 96201 is divisible by 9.

15. (a) 950 : Its ones digit is 0. So it is divisible by 5 and 10 both.
(b) 3040 : Its ones digit is 0. So it is divisible by 5 and 10 both.
(c) 27505 : Its ones digit is 5. So it is divisible by 5 only and not by 10.
(d) 69850 : Its ones digit is 0. So, it is divisible by 5 and 10 both.
(e) 123450 : Its ones digit is 0. So, it is divisible by 5 and 10 both.

16. (a) 83193

Sum of the digits at odd place = $8 + 1 + 3 = 12$

Sum of the digits at even place = $3 + 9 = 12$

Their difference = $12 - 12 = 0$

Thus, 83193 is divisible by 11.

- (b) 202202

Sum of the digits at odd place = $2 + 2 + 0 = 4$

Sum of the digits at even place = $0 + 2 + 2 = 4$

Their difference = $4 - 4 = 0$

Thus, 202202 is divisible by 11.

- (c) 106194

Sum of the digits at odd place = $1 + 6 + 9 = 16$

Sum of the digits at even place = $0 + 1 + 4 = 5$

Their difference = $16 - 5 = 11$, which is a multiple of 11.

Thus, 106194 is divisible by 11.

- (d) 35064

Sum of the digits at odd place = $3 + 0 + 4 = 7$

Sum of the digits at even place = $5 + 6 = 11$

Difference = $11 - 7 = 4$, which is not a multiple of 11.

Thus, 35064 is not divisible by 11.

17. (a) 70, 72, 74, 76, 78, 80, 82, 84, 86 and 88.

(b) 3120, 3122, 3124, 3126, 3128, 3130, 3132, 3134, 3136 and 3138

18. (a) 125, 127, 129, 131, 133, 135, 137, 139, 141, 143, 145, 147, 149

(b) 9893, 9895, 9897, 9899, 9901, 9903, 9905, 9907, 9909, 9911, 9913

Exercise 4C

1. (a) Multiples of 3 $\Rightarrow$ 3, 6, 9, ..., 60, 63, 66, ..., 117, 120, ...
Multiples of 4 $\Rightarrow$ 4, 8, 12, ..., 40, ..., 56, 60, 64, ..., 116, 120, ...
Multiples of 5 $\Rightarrow$ 5, 10, 15, ..., 35, 40, ..., 55, 60, 65, ..., 115, 120, ...
Common multiples of 3, 4 and 5 are 60, 120, etc.
- (b) Multiples of 36 $\Rightarrow$ 36, 72, ..., 216, 252, 288, ..., 468, 504, 540, ...
Multiples of 84 $\Rightarrow$ 84, 168, 252, ..., 420, 504, 588, ...
Common multiples of 36 and 84 are 252, 504, etc.
- (c) Multiples of 12 $\Rightarrow$ 12, 24, 36, 48, 60, 72, 84, 96, ...
Multiples of 24 $\Rightarrow$ 24, 48, 72, 96, ...
Common multiples of 12 and 24 are 24, 48, 72, 96, etc.
- (d) Multiples of 9 $\Rightarrow$ 9, 18, ..., 162, 171, 180, 189, ..., 351, 360, ...
Multiples of 12 $\Rightarrow$ 12, 24, ..., 168, 180, 192, ..., 348, 360, ...
Multiples of 15 $\Rightarrow$ 15, 30, ..., 165, 180, 195, ..., 345, 360, ...
Common multiples of 9, 12 and 15 are 180, 360, etc.
2. All multiples of 30 that lie between 310 and 380-
Multiples of 30 $\Rightarrow$ 30, 60, ..., 270, 300, 330, 360, 390, ...
All Multiples of 30 that lie between 310 and 380 are 330 and 360
3. One factor is 7
Digit sum of the other number is 8 and the other number < 40
Since 7 is a factor, the other number must be multiple of 7.
 $\therefore$ List of multiples of 7 $\Rightarrow$ 7, 14, 21, 28, 35, 42, ...
The other number is 35 as $(3 + 5 = 8)$ and less than 40.
4. Two factors $\Rightarrow$ 3 and 5
Number < 100
One digit of number is 1 more than the other.
 $3 \Rightarrow$ 3, 6, 9, ..., 39, 42, 45, ...
 $5 \Rightarrow$ 5, 10, 15, ..., 35, 40, 45, ...

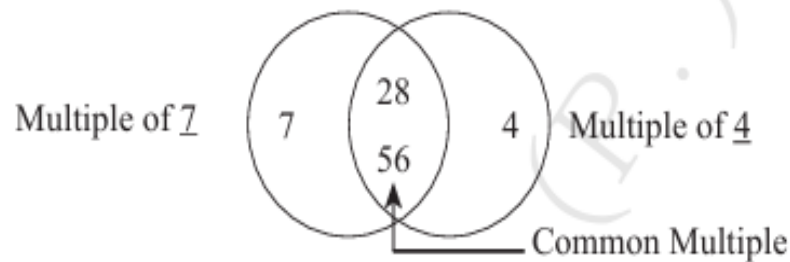
45 is the number which is less than 100 and digits are 4 and 5 (which is 1 more than the other)

5. Multiples of 25 are $\Rightarrow$ 25, 50, 75, 100, 125, 150, 175,

Multiples of 50 are $\Rightarrow$ 50, 100, 150, 200,

$\therefore$ Three number that are multiples of 25 but not multiples of 50 are 25, 75, 125

6. Common Multiples are 28, 56



Exercise 4D

1. (i) Factors of 12 $\Rightarrow$ 1, 2, 3, 4, 6, 12,
 Factors of 16 $\Rightarrow$ 1, 2, 4, 8, 16,
 Common factors of 12 and 16 are 1, 2, 4,
- (ii) Factors of 2 $\Rightarrow$ 1, 2
 Factors of 9 $\Rightarrow$ 1, 3, 9
 Common factors of 2 and 9 is 1.
- (iii) Factors of 20 $\Rightarrow$ 1, 2, 4, 5, 10, 20
 Factors of 4 $\Rightarrow$ 1, 2, 4
 Common factors of 20 and 4 are 1, 2, 4.
- (iv) Factors of 20 $\Rightarrow$ 1, 2, 4, 5, 10, 20
 Factors of 5 $\Rightarrow$ 1, 5
 Common factors of 20 and 5 are 1, 5.
- (v) Factors of 12 are $\Rightarrow$ 1, 2, 3, 4, 6, 12
 Factors of 15 are $\Rightarrow$ 1, 3, 5, 15
 Common factors of 12 and 15 are 1, 3.
- (vi) Factors of 6 $\Rightarrow$ 1, 2, 3, 6
 Factors of 27 $\Rightarrow$ 1, 3, 9, 27
 Common factors of 6 and 27 are 1 and 3.
- (vii) Factors of 4 $\Rightarrow$ 1, 2, 4
 Factors of 16 $\Rightarrow$ 1, 2, 4, 8, 16
 Common factors of 4 and 16 are 1, 2, 4.

(viii) Factors of 8 $\Rightarrow$ ①, ②, ④, 8

Factors of 12 $\Rightarrow$ ①, ②, 3, ④, 6, 12

Common factors of 8 and 12 are 1, 2, 4.

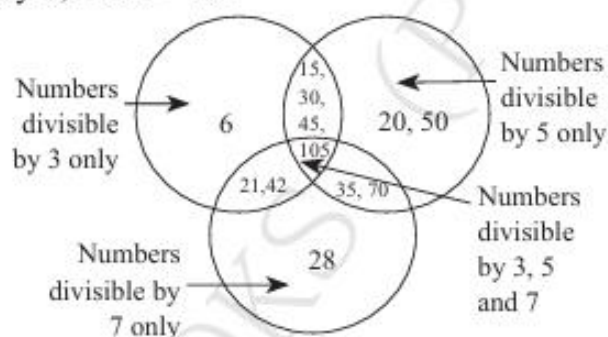
2. 6, 15, 20, 35, 21, 50, 42, 70, 30, 45, 28, 105

(a) Divisible by 3 only = 6, 15, 30, 45, 105, 21, 42

(b) Divisible by 5 only = 20, 50, 15, 30, 45, 105, 35, 70

(c) Divisible by 7 only = 21, 42, 105, 35, 70, 28

(d) Divisible by 3, 5 and = 105



3. 7 is the common factors of the number 21, 35, 49

Review Time

- | | | | | | | |
|------|--------|--------|--------|--------|--|--------|
| I. | 1. (a) | 2. (a) | 3. (b) | 4. (b) | 5. (a) | 6. (c) |
| | 7. (c) | 8. (c) | | | | |
| II. | 1. 1 | 2. 1 | 3. 15 | 4. 2 | 5. $2 \times 2 \times 5 \times 7 \times 7$ | |
| III. | 1. (b) | 2. (a) | 3. (c) | 4. (a) | | |
| IV. | 1. (a) | 2. (a) | | | | |

