

ARBOR INTERNATIONAL SCHOOL

E-Learning module/file



GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

Notes for the parents:

- Dear parents, we hope that this learning module for the week serves its purpose with regards to student's understanding and learning.
- The learning content for the week is attached day wise in this module to facilitate learning for your ward.
- For better clarity, kindly zoom the content.
- Please refer to the page numbers of the text book mentioned in the module for the learning content which is mentioned in the day wise planning. E-content is attached in the module as well.
- Important notes for the chapter are attached with the learning module and the student must go through those for revision of the concepts.
- By the end of the chapter, the students should be able to:
- Convert the units of measurement from largest to smallest and vice versa
- Estimate the sums , difference ,products and Quotients of numbers using approximation
- Represent numbers in Roman system of numeration
- Classify numbers as natural numbers and whole numbers

Day-wise briefing for this learning module:

| Days | Topics to be covered this week |
|-------|---|
| Day 1 | Ch-1, Numbers, Topic: Estimation, Ex-1.2, Q. 3 to Q.5 |
| Day 2 | Ch-1, Numbers, Topic: Roman Numerals, Ex-1.2, Q. 6 to Q.8 |
| Day 3 | Ch-1, Numbers, Ex-1.2, Word Problems, Q.9 to Q.12 |
| Day 4 | Ch-2, Whole Numbers, Topic: Natural numbers, Whole numbers, Number Line, Ex-2.1 |
| Day 5 | Ex 2.1 Q5 to Q10 |

Thank you.

GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

CONTENT- DAY-1

Chapter-1 / Numbers

Topic : Estimation

The teacher will explain the concept of estimating the mathematical operations :- sums, differences, product or the quotient; and how they are useful in the practical life with the help of examples, learning video and PPT.

In order to explain the concepts thoroughly, teacher will discuss the related problems of Exercise-1.2 of Ch-1, Numbers.

The e-content for the Exercise-1.2 of Ch-1, Numbers and related concepts given in Math Edge textbook are attached below. Please check.



GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita.Ms.Kameshwari,Mr.Naresh

3-digit numbers: Consider the number 374. This number lies between 300 and 400. Thus, 374 will be rounded off to 400 since it is closer to 400 than 300.

Example 20: Round off the following numbers to the nearest hundred.

| | | |
|--------|--------|--------|
| a. 987 | b. 833 | c. 756 |
| d. 608 | e. 319 | f. 421 |

Solution: a. 1000 b. 800 c. 800
d. 700 e. 300 f. 400

4-digit numbers: All 4-digit numbers are rounded off to the nearest 100 in similar manner. The following examples will make it amply clear.

Example 21: Round off the following numbers to the nearest 100.

| | | |
|---------|---------|---------|
| a. 1456 | b. 9631 | c. 3542 |
| d. 4374 | e. 4765 | f. 9829 |

Solution: a. 1500 b. 9600 c. 3500
d. 4600 e. 4800 f. 9800

Tip: Larger numbers are rounded off to the nearest 100 using the same rules.

Rounding Off to the Nearest Thousand

- 1-, 2- and 3-digit numbers: Numbers 1 to 449 are closer to 0 than to 1000 and are, therefore, rounded off to 0. Numbers 501 to 999 being closer to 1000 than to 0 are rounded off to 1000 and also 500 is rounded off to 1000.
- 4-digit numbers: Consider 6548. This number lies between 6000 and 7000. Since 6548 is closer to 7000 than to 6000, it is rounded off to 7000.

Example 22: Round off the following numbers to the nearest 1000.

| | | |
|---------|---------|---------|
| a. 9674 | b. 3298 | c. 7500 |
| d. 4399 | e. 3921 | f. 1765 |

Solution: a. 10,000 b. 3000 c. 8000
d. 4000 e. 6000 f. 2000

5-digit numbers: Consider 34852, a number which lies between 34000 and 35000. Since the number is closer to 35000, it is rounded off to 35000.

Example 23: Round off the following numbers to the nearest 1000.

| | | |
|-----------|-----------|-----------|
| a. 27,962 | b. 85,345 | c. 45,287 |
| d. 36,777 | e. 12,123 | f. 49,500 |

Solution: a. 28,000 b. 85,000 c. 45,000
d. 37,000 e. 12,000 f. 50,000

Try This!

1. Round off each of the following numbers to the nearest ten, nearest hundred and nearest thousand.

| | | |
|--------|---------|----------|
| a. 7 | b. 26 | c. 390 |
| d. 432 | e. 7832 | f. 56873 |

Estimating Sums or Differences

1. Poonam has ₹30,000 with her. She goes to an electronic shop to buy a microwave oven and a mobile phone. The microwave oven she selects is priced at ₹17,560. The mobile phone she likes costs ₹8,540. She needs to figure out if she has sufficient money to buy the two items or not. She need not find the total cost of the two items. So, she quickly rounds off the two prices to 18,000 and 9,000. These add up to 27,000. Poonam now knows that she has enough money to buy both the items.

2. Amit goes to Nainital on a school trip. He has ₹5000 with him. He buys a gift for his little sister for ₹580. He spends ₹885 on food. He wants to keep aside ₹3000 for the next two days. To find out how much more he can spend, he quickly adds 600, 900 and 3000 to 4500. He now knows that he can still spend ₹500.

Example 24: Estimate 15,567 + 34,300.

Solution:
Rounding off to the nearest thousand and adding.
Thus, the estimate is 50,000.

Example 25: Estimate 7,980 + 560.

Solution: Rounding off and adding.
Thus, the estimate is 8,600.

Note that 7,980 is rounded off to nearest thousand and 560 to the nearest hundred. This is done to get an estimate closer to the actual value. If both the numbers are rounded off to the nearest thousand, the estimate actual value of the sum is 8,540. Clearly, 8,600 is a better estimate than 9,000.

Example 26: Estimate 673 - 43.

Solution: Rounding off and subtracting.
Thus, the estimate is 660.

| |
|------|
| 700 |
| - 40 |
| 660 |

Note that 673 is rounded off to nearest hundred and 43 to the nearest ten to get a good estimate.

Example 27: Sakshi goes to a shop to buy some clothes for herself. She has ₹5,000 with her. She selects the following: A T-shirt for ₹540, a pair of trousers for ₹1,300, a dress for ₹2,600 and a skirt for ₹1,800. Without actual addition, she knows that she does not have enough money for all the clothes she has selected and decides to leave out the trousers. How do you think she came to this conclusion?

Solution: Sakshi could have estimated the total cost of clothes as follows:
T-shirt: ₹500; Trousers: ₹1500; Dress: ₹2500; Skirt: ₹2000.
These add up to ₹6500. Since she has ₹5000 only available with her, Sakshi decides to leave out the trousers.

Estimating the Product

1. What is the estimate for 38×27 ?

You can try to get the estimate in the following way: $40 \times 30 = 1,200$.

This is a good estimate. Each factor is rounded off to the nearest ten.

2. Find the estimate for 245×678 . The estimate can be found in the following ways:
a. $250 \times 680 = 1,70,000$ b. $200 \times 700 = 1,40,000$

The second way in which every factor is rounded off to the nearest hundred is much easier to calculate than the first way in which every factor has been rounded off to the nearest ten.

This gives us a rule for estimating products:
Each factor of the product is rounded off to its greatest place and the rounded off factors are multiplied.

Example 28: Estimate the following:

| | | |
|-------------------|---------------------|---------------------|
| a. 77×89 | b. 654×358 | c. 62×4651 |
|-------------------|---------------------|---------------------|

Solution: a. $80 \times 90 = 7,200$ b. $700 \times 400 = 2,80,000$
c. $60 \times 5000 = 3,00,000$

Example 29: Raman sold 21 books for ₹375 each. How much he quickly estimate the amount available with him?

Solution: Raman can find the approximate amount available with him as follows:
 $₹(20 \times 400) = ₹8000$.

Estimating the Quotient

1. Estimate $2358 \div 42$.

We can find the estimate by rounding off 42 to 40 and 2358 to either 2400 or 2000. Thus, the estimate is $2400 \div 40 = 60$ or $2000 \div 40 = 50$.

2. Estimate $5643 \div 241$.

We can find the estimate by rounding off 5643 to 6000 and 241 to 200 as follows:
 $6000 \div 200 = 30$.

We arrive at an estimation of the quotient by rounding off each number to its greatest place and then dividing the rounded off numbers.

Example 30: Estimate $7607 \div 489$.

Solution: $8000 \div 500 = 16$.

Example 31: Ayush is visiting his aunt, who lives 365 km away. The bus is moving at the speed of 49 km/hour. Approximately, after how many hours will Ayush reach his Aunt's house?

Solution: The approximate time Ayush will take to reach his Aunt's house is: $400 \div 50 = 8$ hours.

Try This!

1. Estimate the sum or difference by rounding off the numbers to their greatest place.

| | | |
|---------------|----------------------|-------------------|
| a. $267 - 45$ | b. $54,876 - 37,456$ | c. $66,239 + 576$ |
|---------------|----------------------|-------------------|

2. Estimate the following by rounding off the numbers to their greatest place:

| | |
|-------------------|----------------------|
| a. 35×29 | b. 316×4567 |
|-------------------|----------------------|

3. Estimate the following by rounding off the numbers to their greatest place:

| | |
|--------------------|-------------------|
| a. $8576 \div 289$ | b. $6514 \div 78$ |
|--------------------|-------------------|

4. Ravi calculated 29×51 and wrote the answer as 1079. Without calculating, can you find if the answer is correct or not?

GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

Exercise 1.2

1. Fill in the blanks:

a. $75 \times 2 \text{ km} = \text{_____ km} = \text{_____ m}$

b. $25 \times 935 \text{ L} = \text{_____ L} = \text{_____ mL}$

c. $65 \times 8156 \text{ g} = \text{_____ g} = \text{_____ mg}$

d. $95 \times 45 \text{ km} = \text{_____ cm} = \text{_____ mm}$

e. $85 \times 325 \text{ kg} = \text{_____ g}$

f. $75 \times 465 \text{ L} = \text{_____ L} = \text{_____ mL}$

2. Round off the given numbers as indicated:

a. nearest 10 i. 3 ii. 6 iii. 23 iv. 47

b. nearest 100 i. 167 ii. 148 iii. 255 iv. 319

c. nearest 1000 i. 4543 ii. 7123 iii. 1901 iv. 5500

3. Estimate the following as indicated:

a. estimating each term to the nearest 100

i. $957 - 243$ ii. $1567 + 5667$

iii. $523 + 951$ iv. $759 - 654$

b. estimating each term to the nearest 1000

i. $6890 - 3132$ ii. $5296 + 8611$

iii. $4234 - 2444$ iv. $7654 + 3999$

4. Estimate the product by estimating each term to:

a. its greatest place b. nearest 10

i. 458×512 ii. 297×716

iii. 782×403 iv. 726×501

5. Estimate the quotient by estimating each term to its greatest place.

a. $887 \div 32$ b. $1449 \div 264$

c. $2222 \div 521$ d. $3578 \div 77$

6. Write the Roman numeral for: a. 83 b. 235

7. Write the given Roman numerals in Indian system of numerals: a. CCXXIX b. CDXLVII

8. Which of the following Roman numerals are not valid? State the reason for your answer in each case.

a. XXVI b. XVVI c. VXC

d. ICCVI e. LM f. XXXXV

9. A milk booth in a residential colony has 1 kL and 750 mL of milk. If the booth provides 2 L and 250 mL of milk to each family, then find the maximum number of families the booth can cater to. Also find how much milk will be left over?

10. A bakery sells cookies in packs of 45 g each for ₹ 7.50 each. If the bakery produces 115 kg of biscuits every week, how many packs can be made out of the cookies baked? How much, if any, of the cookies will be left over? If the bakery is able to sell all the packets, how much money will they have in a week?

11. A toy store had 5763 marbles in stock. In one month, the store was able to sell off 3445 marbles. Estimate the number of marbles left over, rounding off the numbers to the nearest hundred.

12. A post office dispatches 8638 letters to domestic addresses and 2468 letters to foreign addresses. Estimate the total number of letters dispatched by the post office, rounding off to the nearest ten.

Solutions for selected parts of Q.3, Q.4 & Q.5:-

Q.3 . Estimate the following :-

a) to the nearest 100 :-

i) $957 - 243 = 1000 - 200 = \boxed{800}$

ii) $1567 + 5667 = 1600 + 5700 = \boxed{7300}$

Q3. b) i) $6890 - 3132$ [∴ to nearest 1,000]

$= 7000 - 3000$

$= \underline{4000}$

ii) $5296 + 8611$

$= 5000 + 9000$

$= \underline{14000}$

ARBOR INTERNATIONAL SCHOOL

E-Learning module/file



GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

1. Learning Video :

[https://www.youtube.com/watch?](https://www.youtube.com/watch?v=99zEtdxu97o)

[v=99zEtdxu97o](https://www.youtube.com/watch?v=99zEtdxu97o)

*******End of Day-1*******

GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

CONTENT- DAY-2

Chapter- 1 / Numbers

Topic: Roman Numerals

The teacher will explain the early system of writing numbers i.e. The Roman System of Numeration and explain how to find the value of these roman numerals in whole numbers by following some rules with the help of white board and PPT.

In order to explain the concepts thoroughly, teacher will discuss the related problems of Exercise-1.2 of Ch-1, Numbers.

The e-content for the Exercise-1.2 of Ch-1 and the related concepts given in Math Edge textbook is attached below. Please check.



ROMAN NUMERALS

We have in this chapter discussed the Indian and the International systems of numeration. Another system of numeration in use since the early times is the Roman system of numeration. This system is still used in various places. For example, in schools, classes are written as Class III, Class IV, Class IX.

This system uses seven symbols to write any numeral. The symbols and the numbers they represent are given below:

| Roman Numeral | I | V | X | L | C | D | M |
|---------------|---|---|----|----|-----|-----|------|
| Number | 1 | 5 | 10 | 50 | 100 | 500 | 1000 |

Note The Roman system of numeration does not have:
1. a symbol for Zero, '0'.
2. concept of Place values for digits of a number.

The Roman System of Numeration follows certain rules for usage of the seven symbols.

Rule 1. If a symbol is repeated, then its value gets added. That is $II = 1 + 1 = 2$, $XX = 10 + 10 = 20$.

- Only I, X, C and M can be repeated together for a maximum of three times.
- V, L and D cannot be repeated at all.

For example:
a. $CCC = 100 + 100 + 100 = 300$ b. VV is not valid.
c. $XXX = 10 + 10 + 10 = 30$ d. LL is not valid.

Rule 2. If a symbol of smaller value is placed to the right of a symbol of higher value then the two values get added.

For example:
a. $VI = 5 + 1 = 6$ b. $LXV = 50 + 10 + 5 = 65$
c. $XIII = 10 + 1 + 1 + 1 = 13$
d. $XXV = 10 + 10 + 5 = 25$

Rule 3. If a symbol of smaller value is placed to the left of a symbol of higher value, the value of the smaller symbol is subtracted from the value of the higher symbol.

- V, L and D are never placed to the left of a symbol of higher value.
- I can be placed to the left of V and X only.
- X can be placed to the left of L and C only.
- C can be placed to the left of D and M only.

For example:
a. $IX = 10 - 1 = 9$ b. $XL = 50 - 10 = 40$
c. $XC = 100 - 10 = 90$ d. $CD = 500 - 100 = 400$
e. VX is not valid. f. LC is not valid.

Note I, X and C, can appear to the left of V and X, L and C, or D and M, respectively, only **once**.

Example 32: Complete the table by filling in the roman numerals.

Solution:

| | | | |
|---------|----------|----------|-----------|
| 1 = I | 6 = VI | 20 = XX | 70 = LXX |
| 2 = II | 7 = VII | 30 = XXX | 80 = LXXX |
| 3 = III | 8 = VIII | 40 = XL | 90 = XC |
| 4 = IV | 9 = IX | 50 = L | 100 = C |
| 5 = V | 10 = X | 60 = LX | 200 = CC |

Example 33: Write the Roman numerals for:
a. 87 b. 93 c. 56 d. 72

Solution: a. $87 = 80 + 7 = 50 + 30 + 7 = LXXXVII$
b. $93 = 90 + 3 = (100 - 10) + 3 = XCIII$
c. $56 = 50 + 6 = LVI$
d. $72 = 70 + 2 = 50 + 10 + 10 + 2 = LXXII$

Example 34: Find the total number of days in the months of March, April and May. Write your answer in Roman numeral system.

Solution: Total number of days in March, April and May
 $= 31 + 30 + 31 = 92 = 90 + 2$
 $= (100 - 10) + 2 = XCII$

Example 35: Which of the following Roman numerals are not valid? Support your answer with reasons.
a. VX b. LC c. VVXI d. CCC

Solution:
a. Not valid as the value of X (10) is higher than V (5) and V is never placed to the left of a symbol of higher value.
b. Not valid as the value of C (100) is higher than L (50) and L is never placed to the left of a symbol of higher value.
c. VVXI is invalid because V is never repeated.
d. CCC is valid because $CCC = 100 + 100 + 100 = 300$.

Try This!

- Write the Roman numerals for:
a. 96 b. 85 c. 71 d. 49
- State whether the Roman number CXVVI is valid or not? Give reasons for your answer.

GRADE: VI

SUBJECT: Mathematic

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

Exercise 1.2

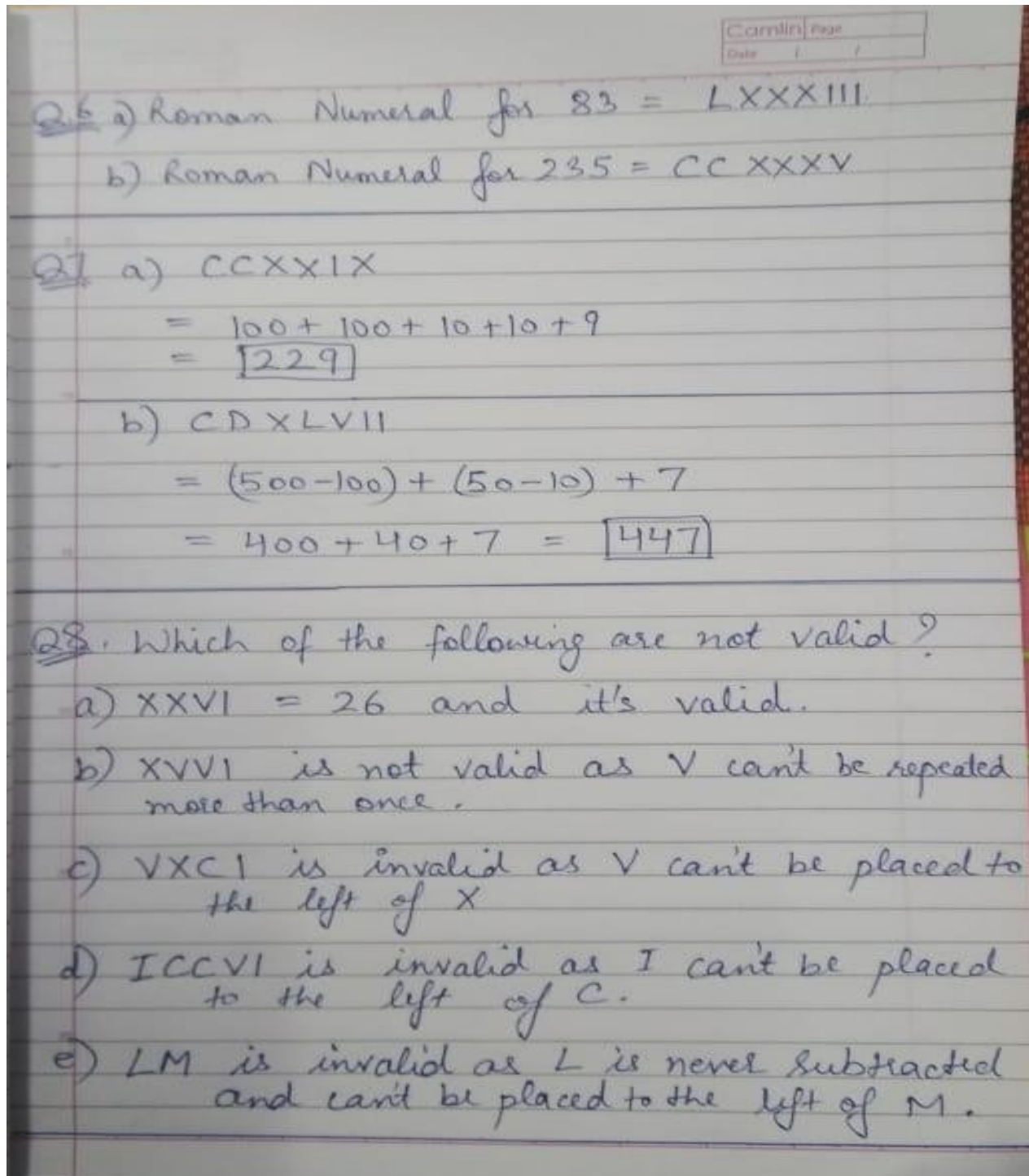
1. Fill in the blanks:
 - a. $75 \times 2 \text{ km} = \text{_____ km} = \text{_____ m}$
 - b. $25 \times 935 \text{ L} = \text{_____ L} = \text{_____ mL}$
 - c. $65 \times 8156 \text{ g} = \text{_____ g} = \text{_____ mg}$
 - d. $95 \times 45 \text{ km} = \text{_____ cm} = \text{_____ mm}$
 - e. $85 \times 325 \text{ kg} = \text{_____ g}$
 - f. $75 \times 465 \text{ L} = \text{_____ L} = \text{_____ mL}$
2. Round off the given numbers as indicated:
 - a. nearest 10 i. 3 ii. 6 iii. 23 iv. 47
 - b. nearest 100 i. 167 ii. 148 iii. 255 iv. 319
 - c. nearest 1000 i. 4543 ii. 7123 iii. 1901 iv. 5500
3. Estimate the following as indicated:
 - a. estimating each term to the nearest 100
 - i. $957 - 243$ ii. $1567 + 5667$
 - iii. $523 + 951$ iv. $759 - 654$
 - b. estimating each term to the nearest 1000
 - i. $6890 - 3132$ ii. $5296 + 8611$
 - iii. $4234 - 2444$ iv. $7654 + 3999$
4. Estimate the product by estimating each term to:
 - a. its greatest place b. nearest 10
 - i. 458×512 ii. 297×716
 - iii. 782×403 iv. 726×501
5. Estimate the quotient by estimating each term to its greatest place.
 - a. $887 \div 32$ b. $1449 \div 264$
 - c. $2222 \div 521$ d. $3578 \div 77$
6. Write the Roman numeral for: a. 83 b. 235
7. Write the given Roman numerals in Indian system of numerals: a. CCXXIX b. CDXLVII
8. Which of the following Roman numerals are not valid? State the reason for your answer in each case.
 - a. XXVI b. XVVI c. VXC
 - d. ICCVI e. LM f. XXXXV
9. A milk booth in a residential colony has 1 kL and 750 mL of milk. If the booth provides 2 L and 250 mL of milk to each family, then find the maximum number of families the booth can cater to. Also find how much milk will be left over?
10. A bakery sells cookies in packs of 45 g each for ₹ 7.50 each. If the bakery produces 115 kg of biscuits every week, how many packs can be made out of the cookies baked? How much, if any, of the cookies will be left over? If the bakery is able to sell all the packets, how much money will they have in a week?
11. A toy store had 5763 marbles in stock. In one month, the store was able to sell off 3445 marbles. Estimate the number of marbles left over, rounding off the numbers to the nearest hundred.
12. A post office dispatches 8638 letters to domestic addresses and 2468 letters to foreign addresses. Estimate the total number of letters dispatched by the post office, rounding off to the nearest ten.

GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

Exercise-1.2 (Q.6 to Q.8)/ Solutions:-

Camlin page
Date / /

Q.6 a) Roman Numeral for 83 = LXXXIII
b) Roman Numeral for 235 = CCXXXV

Q.7 a) CCXXIX
= 100 + 100 + 10 + 10 + 9
= 229

b) CDXLVII
= (500 - 100) + (50 - 10) + 7
= 400 + 40 + 7 = 447

Q.8. Which of the following are not valid?

a) XXVI = 26 and it's valid.

b) XVVI is not valid as V can't be repeated more than once.

c) VXC1 is invalid as V can't be placed to the left of X

d) ICCVI is invalid as I can't be placed to the left of C.

e) LM is invalid as L is never subtracted and can't be placed to the left of M.

GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

*******End of Day-2***

CONTENT- DAY-3

Chapter- 1 / Numbers

Exercise-1.2 [Word Problems]

The teacher will reiterate the concepts learnt in previous class and explain how to comprehend the word problems based on large numbers with the help of white board and PPT.

In order to explain the concepts thoroughly, teacher will discuss the related word problems (Q.9 to Q.12) of Exercise-1.2 of Ch-1, Numbers.

The e-content for the Exercise-1.2 of Ch-1, Numbers is attached below. Please check.



Exercise 1.2

1. Fill in the blanks:

a. $75 \times 2 \text{ km} = \text{_____ km} = \text{_____ m}$

b. $25 \times 935 \text{ L} = \text{_____ L} = \text{_____ mL}$

c. $65 \times 8156 \text{ g} = \text{_____ g} = \text{_____ mg}$

d. $95 \times 45 \text{ km} = \text{_____ cm} = \text{_____ mm}$

e. $85 \times 325 \text{ kg} = \text{_____ g}$

f. $75 \times 465 \text{ L} = \text{_____ L} = \text{_____ mL}$

2. Round off the given numbers as indicated:

a. nearest 10 i. 3 ii. 6 iii. 23 iv. 47

b. nearest 100 i. 167 ii. 148 iii. 255 iv. 319

c. nearest 1000 i. 4543 ii. 7123 iii. 1901 iv. 5500

3. Estimate the following as indicated:

a. estimating each term to the nearest 100

 i. $957 - 243$ ii. $1567 + 5667$

 iii. $523 + 951$ iv. $759 - 654$

b. estimating each term to the nearest 1000

 i. $6890 - 3132$ ii. $5296 + 8611$

 iii. $4234 - 2444$ iv. $7654 + 3999$

4. Estimate the product by estimating each term to:

a. its greatest place b. nearest 10

 i. 458×512 ii. 297×716

 iii. 782×403 iv. 726×501

5. Estimate the quotient by estimating each term to its greatest place.

a. $887 \div 32$ b. $1449 \div 264$

c. $2222 \div 521$ d. $3578 \div 77$

6. Write the Roman numeral for: a. 83 b. 235

7. Write the given Roman numerals in Indian system of numerals: a. CCXXIX b. CDXLVII

8. Which of the following Roman numerals are not valid? State the reason for your answer in each case.

a. XXVI b. XVVI c. VXC1

d. ICCVI e. LM f. XXXXV

9. A milk booth in a residential colony has 1 kL and 750 mL of milk. If the booth provides 2L and 250 mL of milk to each family, then find the maximum number of families the booth can cater to. Also find how much milk will be left over?

10. A bakery sells cookies in packs of 45 g each for ₹ 7.50 each. If the bakery produces 115 kg of biscuits every week, how many packs can be made out of the cookies baked? How much, if any, of the cookies will be left over? If the bakery is able to sell all the packets, how much money will they have in a week?

11. A toy store had 5763 marbles in stock. In one month, the store was able to sell off 3445 marbles. Estimate the number of marbles left over, rounding off the numbers to the nearest hundred.

12. A post office dispatches 8638 letters to domestic addresses and 2468 letters to foreign addresses. Estimate the total number of letters dispatched by the post office, rounding off to the nearest ten.

NUMBERS

GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

Solutions for Q.9 to Q.12:-

Ex-1.2

Q.9 Total quantity of milk at the booth
 $= 1 \text{ kl } 750 \text{ ml}$
 $= 1,000,750 \text{ ml}$

Quantity of milk given to each family
 $= 2 \text{ l } 250 \text{ ml}$
 $= 2,250 \text{ ml}$

$\therefore 2,250 \text{ ml}$ of milk provided to $\rightarrow 1$ family.

So, $1,000,750 \text{ ml}$ of milk provided to \rightarrow
 $= 1,000,750 \div 2,250$

$$\begin{array}{r} 2250 \overline{) 1000750} \quad (444 \\ - 9000 \downarrow \\ \underline{10075} \\ - 9000 \downarrow \\ \underline{10750} \\ - 9000 \\ \underline{1750} \end{array}$$

Therefore, milk will be provided to 444 families and 1750 ml or 1 l 750 ml of milk will be left over.

Q.10 Number of cookies weighing $45 \text{ g} = 1$

Number of cookies weighing 115 kg
 $= 115 \text{ kg} \div 45 \text{ g}$
 $= 115000 \text{ g} \div 45 \text{ g}$

$$\begin{array}{r} 45 \overline{) 115000} \quad (2555 \\ - 90 \downarrow \\ \underline{250} \\ - 225 \downarrow \\ \underline{250} \\ - 225 \downarrow \\ \underline{250} \\ - 225 \downarrow \\ \underline{25} \end{array}$$

Therefore, 2555 packs of cookies can be made and 25 g will be left over.

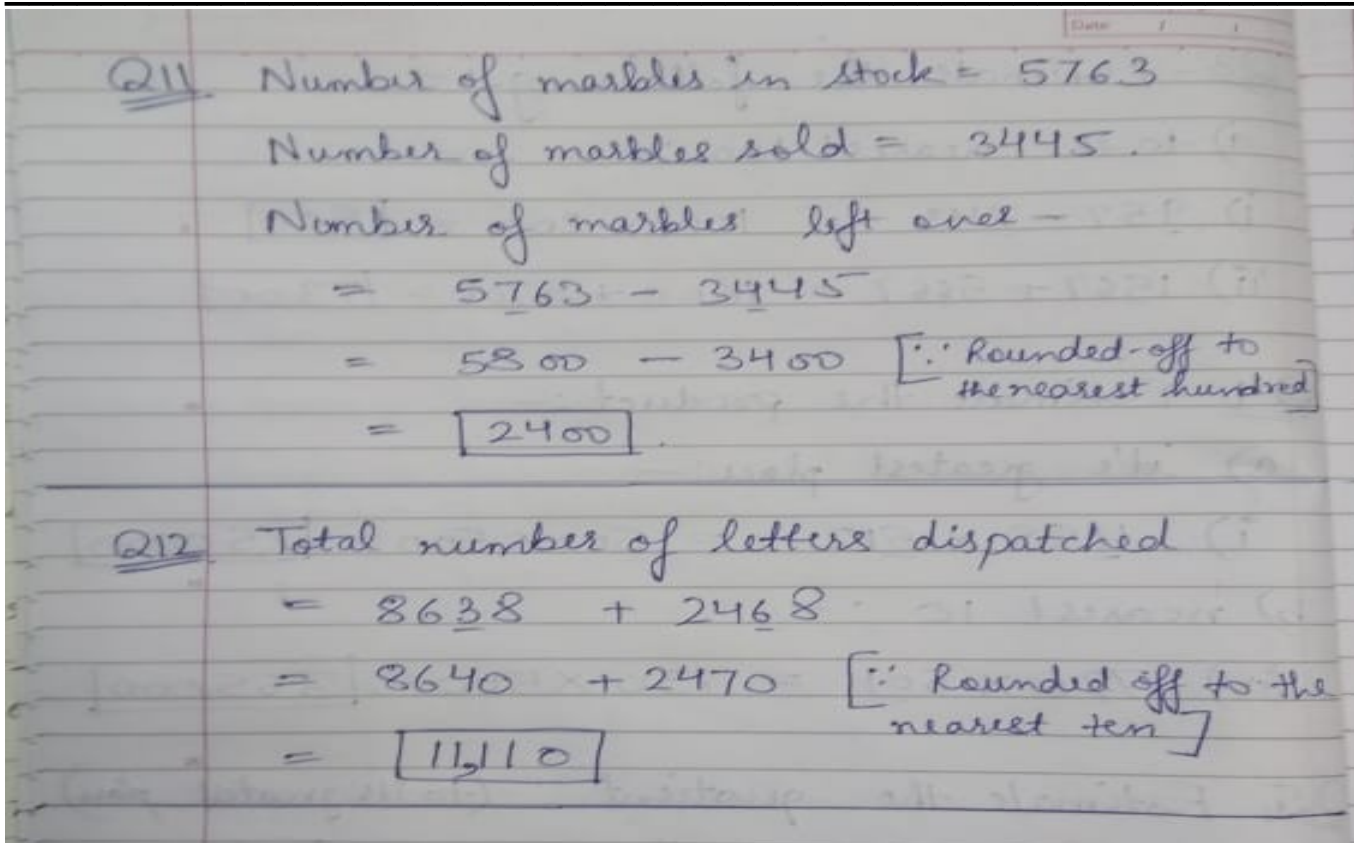
Money earned by selling cookies
 $= \text{No. of cookies} \times \text{Price of each cookie}$
 $= 2555 \times ₹ 7.50$
 $= ₹ 19,162.50$

GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh



Q11 Number of marbles in stock = 5763
Number of marbles sold = 3445
Number of marbles left over -
 $= 5763 - 3445$
 $= 5800 - 3400$ [\because Rounded-off to the nearest hundred]
 $= \boxed{2400}$

Q12 Total number of letters dispatched
 $= 8638 + 2468$
 $= 8640 + 2470$ [\because Rounded off to the nearest ten]
 $= \boxed{11110}$

*****End of Day-3*****

GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

CONTENT- DAY-4

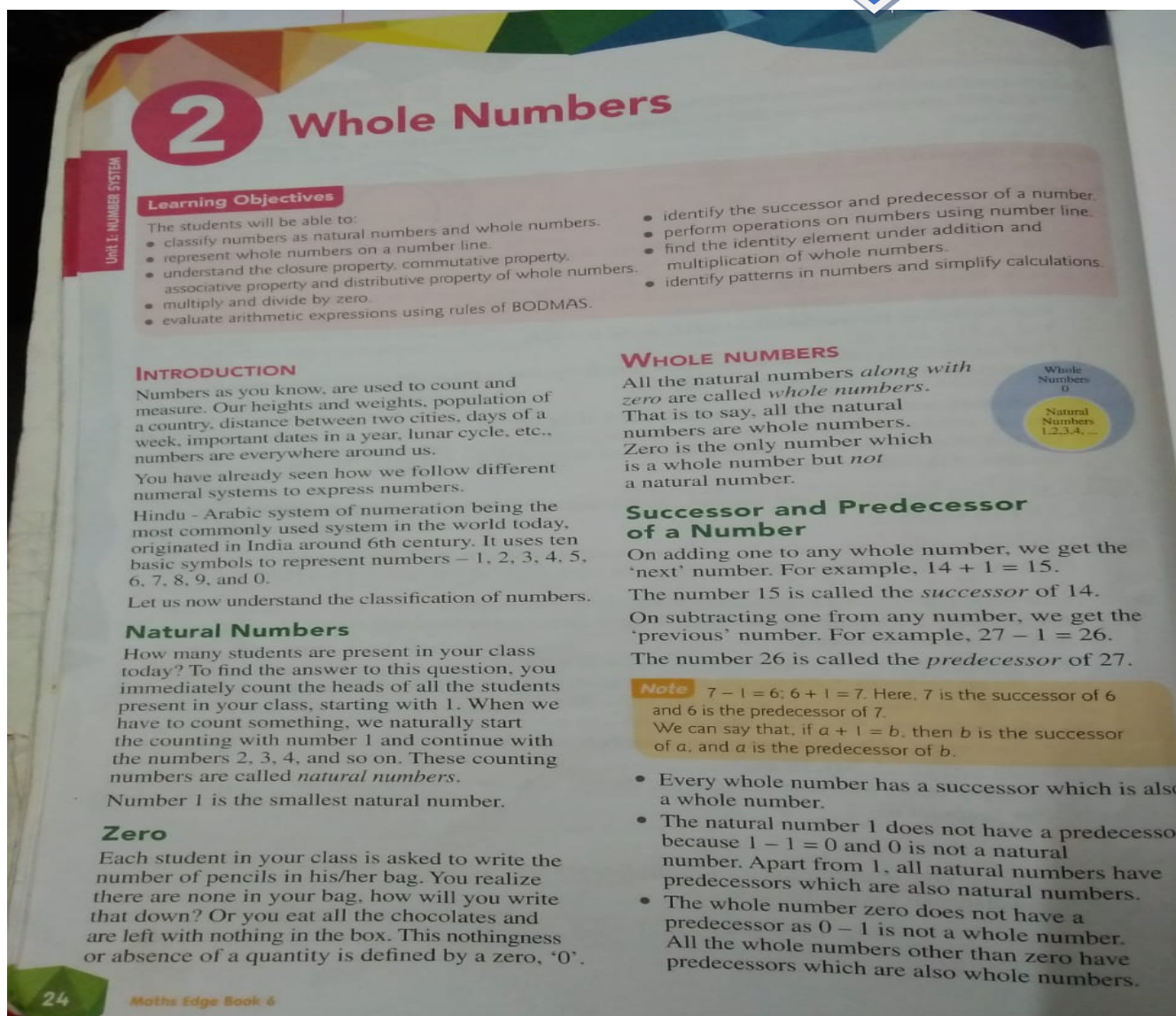
Chapter-2 / Whole Numbers

Topic : Introduction

The teacher will explain the concept of classifying numbers as natural and whole numbers and also how to represent the whole numbers on a number line with the help of examples, learning video and PPT.

In order to explain the concepts thoroughly, teacher will discuss the related problems of Exercise-2.1 of Ch-2, Whole Numbers.

The e-content for the Exercise-2.1 of Ch-2, Whole Numbers and related concepts given in Math Edge textbook are attached below. Please check.



GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

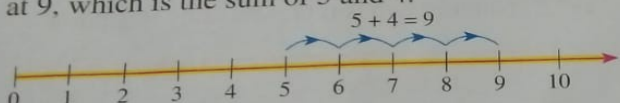
Mathematical Operations on a Number Line

We will now see how we can perform the arithmetic operations involving whole numbers on a number ray.

Addition

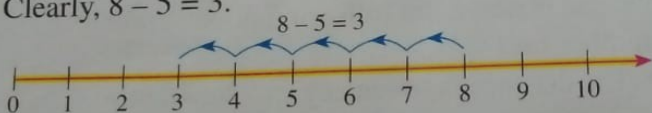
Addition of two whole numbers, say, 5 and 4 (which are known as addends) can be shown as follows:

When we add 4 to 5 we get a number larger than 5. Therefore, while *adding* these two whole numbers, we move right from number 5. Thus, when we take four jumps from 5 to the right, first from 5 to 6, second from 6 to 7, third from 7 to 8 and the fourth from 8 to 9, we arrive at 9, which is the sum of 5 and 4.



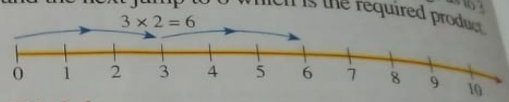
Subtraction

How do we find $8 - 5$? When 5 is subtracted from 8, we get a number smaller than 8. Therefore, to subtract, we will move *left* from 8. We make five jumps to the left of 8 to reach at 3. Clearly, $8 - 5 = 3$.



Multiplication

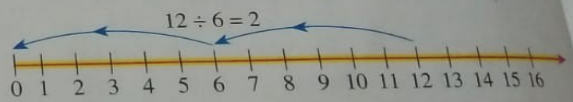
We know that multiplication is a process of repeated addition. We will therefore, be moving right while performing multiplication of two whole numbers. To find 3×2 , we start from 0, take two jumps of three units each, towards right. The first jump brings us to 3 and the next jump to 6 which is the required product.



Division

Division is a process of repeated subtraction. Thus as seen earlier we will move left towards 0 when dividing one whole number by another.

Let us find $12 \div 6$. Starting from 12, jumps of 6 steps each are made towards the left, till we arrive at zero. The first jump brings us to 6 and the second jump brings the arrow to zero. Now, $12 \div 6 = \text{number of jumps} = 2$. Thus, $12 \div 6 = 2$.



Try This!

- Find the following using a number line:

| | | | |
|-----------------|-----------------|---------------|----------------|
| a. $12 + 5$ | b. $9 + 11$ | c. $13 - 7$ | d. $19 - 6$ |
| e. 4×5 | f. 7×2 | g. $9 \div 3$ | h. $20 \div 4$ |

Exercise 2.1

- Write the smallest natural number.
 - Write the smallest whole number.
- Is every whole number a natural number?
- Write the successor of the following whole numbers:

| | | |
|------------|-------------|---------------|
| i. 2567899 | ii. 5236781 | iii. 10030000 |
|------------|-------------|---------------|
 - Write the predecessor of the following whole numbers:

| | | |
|-------------|-------------|--------------|
| i. 76489000 | ii. 3783132 | iii. 4001099 |
|-------------|-------------|--------------|
- Select the right answers:

| | |
|-------------------------------|-----------|
| a. The predecessor of 4500 is | iii. 4501 |
| i. 4500 | ii. 4499 |
 - The successor of 6560 is

| | | |
|---------|----------|-----------|
| i. 6569 | ii. 6561 | iii. 6459 |
|---------|----------|-----------|
 - The predecessor of 8560 is

| | | |
|---------|----------|-----------|
| i. 8559 | ii. 8569 | iii. 8561 |
|---------|----------|-----------|
 - The successor of 2390 is

| | | |
|---------|----------|-----------|
| i. 2399 | ii. 2391 | iii. 2389 |
|---------|----------|-----------|
- Write the three whole numbers immediately preceding and three whole numbers immediately succeeding:

| | |
|-------------|---------------|
| a. 54890089 | b. 998800899. |
|-------------|---------------|
- Is it true that:

| | |
|--|--|
| a. every whole number has a successor? | b. every whole number has a predecessor? |
|--|--|
 - Write, if possible, the largest whole number.
 - How many whole numbers are there between:

| | |
|---------------|-----------------|
| a. 42 and 57? | b. 342 and 352? |
|---------------|-----------------|
- In the following pair of numbers:

| | |
|---|----------------|
| a. identify the number to the right of the other number on a number line: i. 319, 322 | ii. 4783, 4774 |
|---|----------------|
 - identify the number to the left of the other number on a number line:

| | |
|------------------|------------------|
| i. 100000, 99999 | ii. 65478, 65511 |
|------------------|------------------|
- Represent the following whole numbers on a number line:

| | |
|------------|-------------|
| a. 4, 7, 9 | b. 5, 6, 10 |
|------------|-------------|
- Perform the following operations on a number line:

| | | | |
|-----------------|-----------------|-----------------|-----------------|
| a. $2 + 5$ | b. $8 - 3$ | c. $4 + 7$ | d. $9 - 4$ |
| e. 3×4 | f. 5×3 | g. 2×4 | h. 4×5 |
| i. $12 \div 3$ | j. $20 \div 4$ | k. $16 \div 4$ | l. $18 \div 3$ |

Maths Edge Book 6

GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

Solution for Q.1 to Q.4 :-

Camlin Page
Date / /

Ex - 2.1

Q1. a) The smallest natural number is 1.
 b) The smallest whole number is 0.
 c) No, Zero is a whole number but not a natural number.

Q2. a) Successor :- i) $25,67,899 \rightarrow 25,67,900$
 ii) $52,36,781 \rightarrow 52,36,782$
 iii) $1,00,30,000 \rightarrow 1,00,30,001$
 b) Predecessor :- i) $7,64,88,999 \leftarrow 7,64,89,000$
 ii) $37,83,131 \leftarrow 37,83,132$
 iii) $40,01,098 \leftarrow 40,01,099$

Q3. a) ii) 4499 c) i) 8559
 b) ii) 6561 d) ii) 2391

Q4. a) 54890089 :- 54890088, 54890087,
 54890086.
 (No.'s preceding \uparrow)
 54890090, 54890091,
 54890092.
 (No.'s succeeding \uparrow)

GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

CONTENT- DAY-5

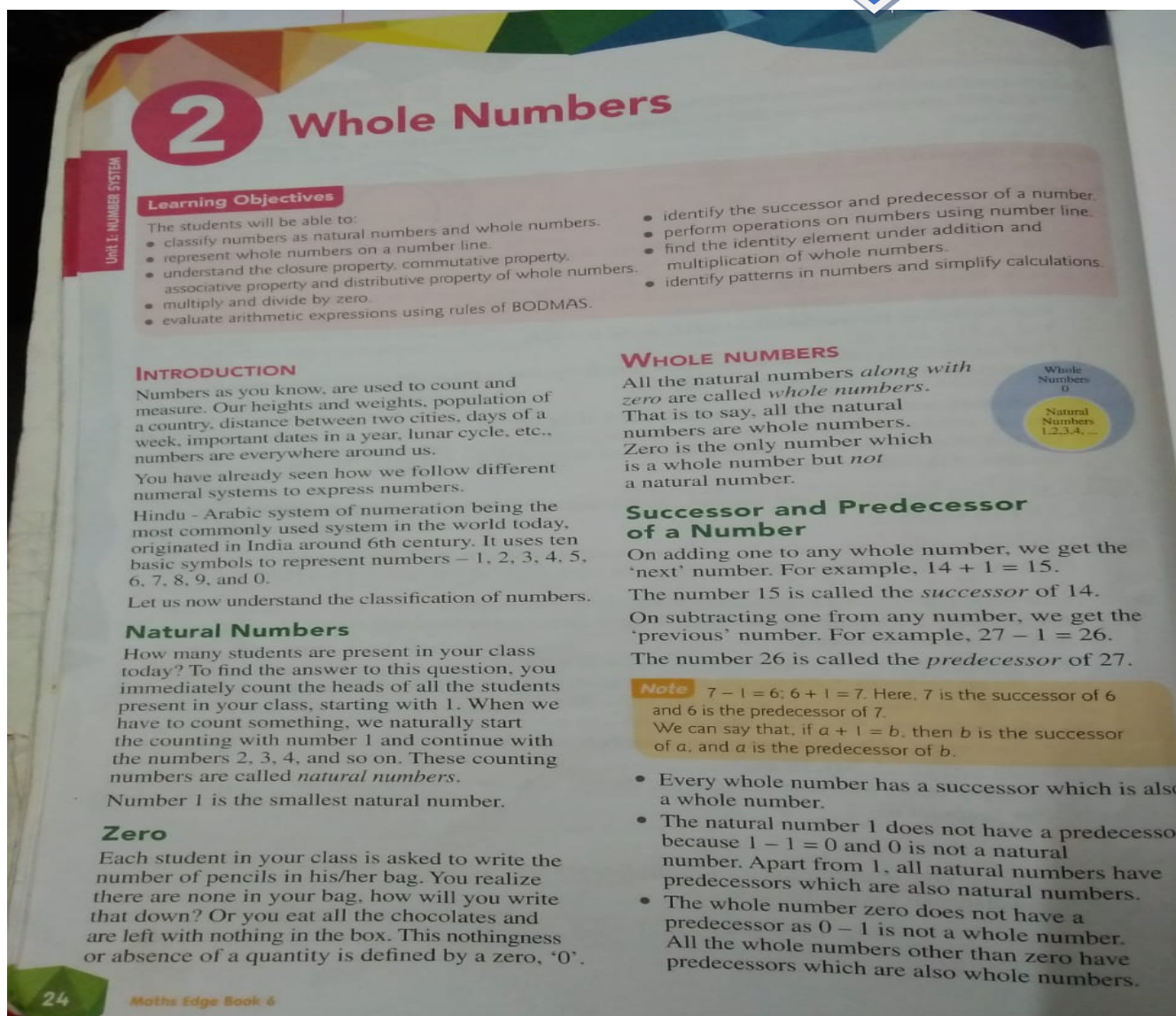
Chapter-2 / Whole Number

Topic :Ex 2.1 Q5 to Q10

The teacher will explain the concept of classifying numbers as natural and whole numbers and also how to represent the whole numbers on a number line with the help of examples, learning video and PPT.

In order to explain the concepts thoroughly, teacher will discuss the related problems of Exercise-2.1 of Ch-2, Whole Numbers.

The e-content for the Exercise-2.1 of Ch-2, Whole Numbers and related concepts given in Math Edge textbook are attached below. Please check.



GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

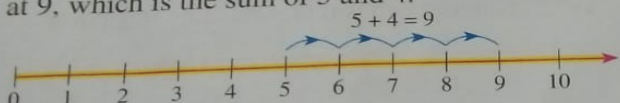
Mathematical Operations on a Number Line

We will now see how we can perform the arithmetic operations involving whole numbers on a number ray.

Addition

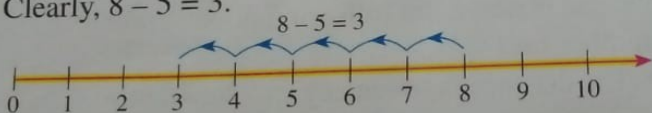
Addition of two whole numbers, say, 5 and 4 (which are known as addends) can be shown as follows:

When we add 4 to 5 we get a number larger than 5. Therefore, while *adding* these two whole numbers, we move right from number 5. Thus, when we take four jumps from 5 to the right, first from 5 to 6, second from 6 to 7, third from 7 to 8 and the fourth from 8 to 9, we arrive at 9, which is the sum of 5 and 4.



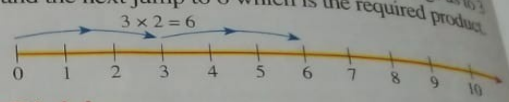
Subtraction

How do we find $8 - 5$? When 5 is subtracted from 8, we get a number smaller than 8. Therefore, to subtract, we will move *left* from 8. We make five jumps to the left of 8 to reach at 3. Clearly, $8 - 5 = 3$.



Multiplication

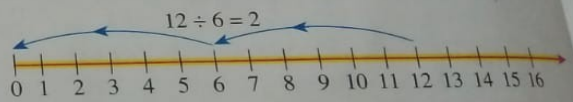
We know that multiplication is a process of repeated addition. We will therefore, be moving right while performing multiplication of two whole numbers. To find 3×2 , we start from 0, take two jumps of three units each, towards right. The first jump brings us to 3 and the next jump to 6 which is the required product.



Division

Division is a process of repeated subtraction. Thus as seen earlier we will move left towards 0 when dividing one whole number by another.

Let us find $12 \div 6$. Starting from 12, jumps of 6 steps each are made towards the left, till we arrive at zero. The first jump brings us to 6 and the second jump brings the arrow to zero. Now, $12 \div 6 = \text{number of jumps} = 2$. Thus, $12 \div 6 = 2$.



Try This!

- Find the following using a number line:

| | | | |
|-----------------|-----------------|---------------|----------------|
| a. $12 + 5$ | b. $9 + 11$ | c. $13 - 7$ | d. $19 - 6$ |
| e. 4×5 | f. 7×2 | g. $9 \div 3$ | h. $20 \div 4$ |

Exercise 2.1

- Write the smallest natural number.
 - Write the smallest whole number.
- Is every whole number a natural number?
- Write the successor of the following whole numbers:

| | | |
|------------|-------------|---------------|
| i. 2567899 | ii. 5236781 | iii. 10030000 |
|------------|-------------|---------------|
 - Write the predecessor of the following whole numbers:

| | | |
|-------------|-------------|--------------|
| i. 76489000 | ii. 3783132 | iii. 4001099 |
|-------------|-------------|--------------|
- Select the right answers:

| | |
|-------------------------------|-----------|
| a. The predecessor of 4500 is | |
| i. 4500 | ii. 4499 |
| b. The successor of 6560 is | iii. 4501 |
| i. 6569 | ii. 6561 |
| c. The predecessor of 8560 is | iii. 6459 |
| i. 8559 | ii. 8569 |
| d. The successor of 2390 is | iii. 8561 |
| i. 2399 | ii. 2391 |
| | iii. 2389 |
- Write the three whole numbers immediately preceding and three whole numbers immediately succeeding:

| | |
|-------------|---------------|
| a. 54890089 | b. 998800899. |
|-------------|---------------|
- Is it true that:

| |
|--|
| a. every whole number has a successor? |
| b. every whole number has a predecessor? |
 - Write, if possible, the largest whole number.
 - How many whole numbers are there between:

| | |
|---------------|-----------------|
| a. 42 and 57? | b. 342 and 352? |
|---------------|-----------------|
 - In the following pair of numbers:

| | |
|---|------------------|
| a. identify the number to the right of the other number on a number line: i. 319, 322 | ii. 4783, 4774 |
| b. identify the number to the left of the other number on a number line: i. 100000, 99999 | ii. 65478, 65511 |
- Represent the following whole numbers on a number line:

| | |
|------------|-------------|
| a. 4, 7, 9 | b. 5, 6, 10 |
|------------|-------------|
- Perform the following operations on a number line:

| | | | |
|-----------------|-----------------|-----------------|-----------------|
| a. $2 + 5$ | b. $8 - 3$ | c. $4 + 7$ | d. $9 - 4$ |
| e. 3×4 | f. 5×3 | g. 2×4 | h. 4×5 |
| i. $12 \div 3$ | j. $20 \div 4$ | k. $16 \div 4$ | l. $18 \div 3$ |

Maths Edge Book 6

GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

Q.5. a) Yes, every whole number has a successor.

b) No, Zero is the only whole number which doesn't have a predecessor.

Q.6. a) There is no largest whole number.

b) Infinite.

Q.7. b) Numbers between 342 & 352

$$= 352 - 342$$

$$= 10$$

But, to find the no.'s between 342 & 352, we need to exclude 352 from the difference 10.

So, $10 - 1 = 9$. Hence, there are 9 numbers in between 342 & 352.

Q.8. a) 322 is to the right of 319
4,783 is to the right of 4,774

b) 99,999 is to the left of 1,00,000
65,478 is to the left of 65,511

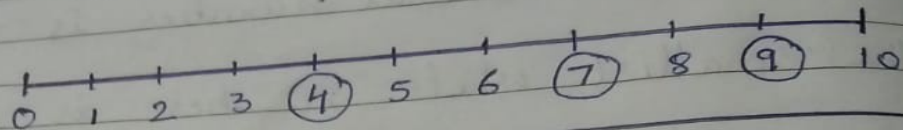
GRADE: VI

MONTH/WEEK/DATE: April/ W-1/ 04-04-22 to 08-04-22

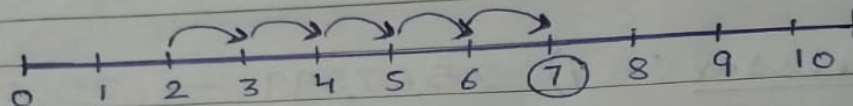
SUBJECT: Mathematic

NAME OF THE TEACHER: Ms.Sarita,Ms.Kameshwari,Mr.Naresh

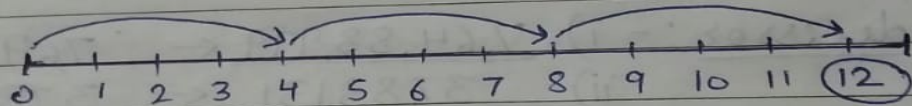
Q9. a) 4, 7, 9



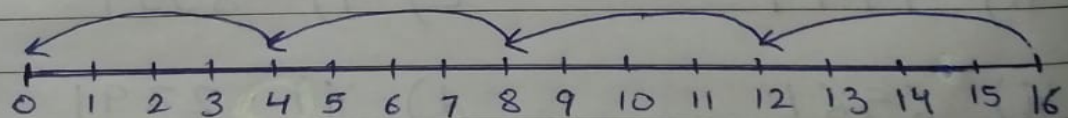
Q10. a) $2 + 5 = 7$



e) $3 \times 4 = 12$



K) $16 \div 4 = 4$



Number of jumps to reach zero = 4
Thus, $16 \div 4 = 4$

*****End of Day*****

