#### **REVISION SHEET**

**SUBJECT: MATHEMATICS** 

**CLASS-VII** 

TERM 1

## **INTEGERS**

Q1) Tick the correct option	Q1)	Tick	the	correct	opti	on:
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- (i) \_\_\_\_\_ property is reflected in the following equation:  $147 \times 5 = 5 \times 147$ .
  - a) Closure
- b) Commutative
- c) Associative d) Distributive
- (iii) Sum of integer and its additive inverse is
  - a) 0
- b) integer itself
- c) 1

d) -1

 $(iv) -36 \div (\underline{\phantom{a}}) = -9$ 

- a) 4
- b) -4

c) 9

- d) 1
- Q2) Write the additive identity and multiplicative identity for integers.
- Q3) What is the additive and multiplicative inverse of (-6).
- Q 4) Find the product:

a) 
$$5 \times (-215) \times (-8) \times 0$$

b) 
$$(-1) \times (-1) \times (-1) \times (-1) \times \dots 97$$
 times

Q5) Verify a + (b + c) = (a + b) + c for the following:

$$a = 2, b = 0, c = -9$$

- Q6) In a class test containing 20 questions, 5 marks are awarded for each correct answer and 2 marks is deducted for each wrong answer. If Riya gets 15 correct answers out of all the questions attempted. What is her total score?
- Q7) What number should be added to the sum of 345 and 67 to make it equal to the smallest 3-digit number?
- Q8) During summer, the temperature within a room is 37° C. If an air conditioner cools the room by 5° C/min. What will be the temperature of the room after 5 minutes of switching on the air conditioner?

# FRACTION AND DECIMALS

Q1) Tick the correct answer:

(i)  $312.78 \div 1000 =$ 

a) 0.31278

b) 3.1278 c) 312.78

d) 3127.8

Reciprocal of  $7\frac{2}{3}$  is \_\_\_\_\_ (ii) b)  $\frac{3}{23}$  c)  $\frac{2}{3}$ 

d)  $\frac{7}{3}$ 

Q2) If the product of 38.46 and another number is 653.82, what is the other number?

Q3) Megha bought 12 bags of wheat flour each weighing 4563/100 kg. What will be the total weight?

Q4) Shikha plants 5 saplings in a row in her garden. The distance between two adjacent saplings is <sup>3</sup>/<sub>4</sub> m. Find the distance between the first and the last sapling.

Q5) A barrel has 56.32 liters capacity. If Supriya used 21.19 liters, how much water is left in the barrel.

Q6) The perimeter of the hexagon is 12.036 cm. Find the length of each side of hexagon.

## DATA HANDLING

Q1) Tick the correct answer:

(i) The number of times an observation occurs in a data is called its

a) Range

b) Raw data

c) Interval

d) Frequency

(ii) The median of the data 46,64,87, 41,58,77,35,90,55,33,92 is ...

a) 87

b) 77

c) 58

d) 60.2

(iii) is correct about mode.

a) It is central.

b) It occurs most frequently.

c) It lies between the maximum and minimum observations.

d) It is the average of the two middle terms.

Q2) A cricketer scores the following below runs in his eight innings:

58, 46, 76, 40, 35, 45, 0 and 100.

a) Find out his highest and lowest score.

b) What is the range of the data?

c) Determine the mean score.

Q3) Find out the mode and median of the data 13,16,12,14,19,12,14,13,14.

Q4) Two hundred students of 6th and 7th class were asked to name their favourite colour so as to decide upon what should be the colour of their School Building. The results are shown in the following table. Represent the given data on a bar graph.

Favourite Colour	Red	Green	White	Yellow	Blue
Number of Students (Class VI)	42	9	15	20	14
Number of Students (Class VII)	34	16	15	15	20

### **SIMPLE EQUATIONS**

correct	answer:
	correct

- i) \_\_\_\_\_ is a solution of the equation 2x = 12
  - $\overline{(a)} x = 2$
- (b) x = 3
- (c) x = 4
- (d) x = 6

- ii) The solution of the equation 2p 1 = 23 is p =
  - (a) 12

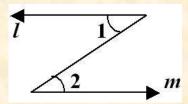
- (b) 11
- (c) 10
- (d) 9

- Q2) Solve the following equations:
  - (a) 3n + 7 = 25
  - (b) -2(x+3)=8
- Q3) Write in equation form:
  - a) y is multiplied by -5 and the result is added to 16 to get 8.
  - b) 5 times y from which 3 is subtracted to get 33
- Q4) Raju's father's age is 5 years more than three times Raju's age. Find Raju's age if his father is 44 years old.
- Q5) Smita's mother is 34 years old. Two years from now mother's age will be 4 times Smita's present age. What is Smita's present age?
- Q6) The sum of two consecutive multiples of 3 is 69. Find the numbers.
- Q7) The length of a rectangular plot exceeds its breadth by 5 m. If the perimeter of the plot is 142 m, find the dimensions of the plot.
- Q8) Four-fifths of a number is greater than three-fourths of the number by 4. Find the number.

## LINES AND ANGLES

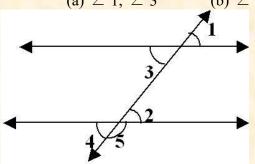
## Q1 Tick the correct answer:

- i) If two adjacent angles are supplementary, then they form \_\_\_\_\_.
  - (a) Corresponding angles
- (b) vertically opposite angles
- (c) a linear pair of angles
- (d) a ray
- ii) If two angles are supplementary then the sum of their measures is \_\_\_\_\_.
  - (a)  $90^{\circ}$
- (b) 180°
- (c)  $360^{\circ}$
- (d)  $45^{\circ}$
- iii) If two angles are complementary, then the sum of their measures is \_\_\_\_\_\_.
  - (a) 45°
- (b) 180°
- (c)  $90^{\circ}$
- (d) 360°
- iv) If  $l \parallel m$ , then measure of angle 1= measure of angle 2 because they are \_\_\_\_\_.

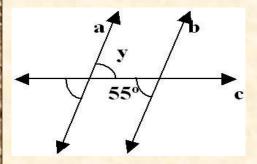


- (a) corresponding angles
- (b) vertically opposite angles
- (c) alternate interior angles
- (d) supplementary angles
- v) In fig. pair of alternate interior angles are \_\_\_\_\_:

- (a)  $\angle$  1,  $\angle$  3 (b)  $\angle$  2,  $\angle$  3 (c)  $\angle$  2,  $\angle$  5 (d)  $\angle$  1,  $\angle$  2

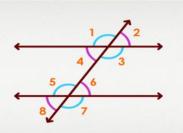


Q2) If Line  $a \parallel b$ , c is a transversal then find  $\angle y$ .



Q3) What is the measure of the complement of 54°?

Q4) Look at the given figure and answer the following questions:



a) A linear pair

b) A pair of vertically opposite angles

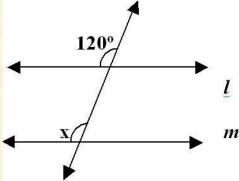
c) Exterior angles

d) Alternate Interior angles

e) Adjacent angles

f) Corresponding angles

Q5) Lines  $l \parallel m$ , t is a transversal, what is the value of  $\angle x = ?$ 



# PERIMETER AND AREA

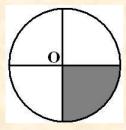
Q1) Tick the correct answer:

- The area of parallelogram is i)
  - (a) base + height
- (b) base x height (c) base x base
- (d) height x height
- The area of a rectangular sheet is 500 cm<sup>2</sup>. If the length of the sheet is 25 cm, then \_\_\_\_\_ is its ii) width?
  - (a) 20 cm
- (b) 17 cm
- (c) 30 cm
- (d) 25 cm

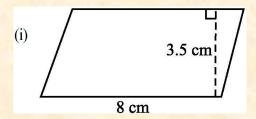
- If the area of rectangle increases from 2 cm<sup>2</sup> to 4 cm<sup>2</sup> the perimeter will iii)
  - (a) increase
- (b) decrease
- (c) remains same
- (d) none of these
- is the area of a square whose perimeter is 4 m. (b)  $4 \text{ m}^2$  (c)  $2 \text{ m}^2$

- (d)  $3 \text{ m}^2$

- v) (pi) is
  - a. ratio of circumference to diameter
- (b) 21/17
- (c) diameter to circumference
- (d) 3.41
- Q2) Find the area of shaded portion, if area of the circle is 44 cm<sup>2</sup>.



- Q3) The two sides of the parallelogram ABCD are 6 cm and 4 cm. The height corresponding to the base CD is 3 cm. Find the (i) area of the parallelogram. (ii) the height corresponding to the base AD.
- Q4) Find BC, if the area of the triangle ABC is 36 cm<sup>2</sup> and the height AD is 3 cm.
- Q5) What is the circumference of a circle of diameter 10 cm (Take  $\square = 3.14$ )?
- Q6) Find the area of the following figure:



Q7) Rahul draws 2 circles with same centre, a big circle with radius 10 cm and a small circle with radius 4cm. Find the area between two circles.

<b>SYMMETRY</b>					
Q1) Tick the correct answer	er:				
i) has both hori	zontal as well as vertical	line of symmetry:			
(a) S	(b) A	(c) U	(d) H		
ii) is the mirror im	age of 'W', when the min	rror is placed vertically.			
(a) V	(b) M	(c) 🗆	(d) W		
iii) is the number of lines of symmetry a triangle has.					
(a) 1	(b) 2	(c) 3	(d) 0		
iv) A marallala arram has	lines of symmetry				
iv) A parallelogram has _ (a) 0	(b) 1	(c) 2	(d) 3		
) II	41	anvilata val tuia u ala 2			
v) How many lines of syr (a) 1	(b) 2	(c) 3	(d) 4		
vi) Which of the following letters have reflection line of symmetry about vertical mirror?					
(a) B	(b) C	(c) V	(d) Q		
Q2) What is the other nam	e of line of symmetry of				
a) an isosceles triangle	or and or symmetry or				
b) A circle					
Q3) Fill in the blanks:					
Q3) I'm m the blanks.					
SHAPE	CENTRE OF ROTATION	ORDER OF ROTATION	ANGLE OF ROTATION		
SQUARE	ROTHION	ROTHTON	ROTHION		
RECTANGLE					
RHOMBUS					
EQUILATERAL					
TRIANGLE					
REGULAR					
HEXAGON					
CIRCLE					
SEMI-CIRCLE					

#### CASE STUDY BASED QUESTION

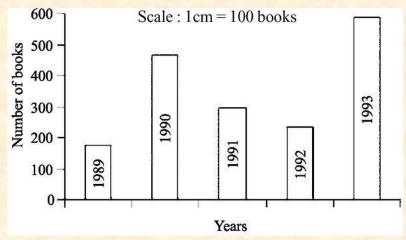
Q1) A diver descends 20 feet in the water from the boat at the surface of a lake. He then rose 12 feet and descends another 18 feet.



### On the basis of the given information, answer the following questions:

- a) Represent 20 feet in the form of integers.
- b) Represent rise of 12 feet in the form of integers.
- c) At this point what is his depth in water?

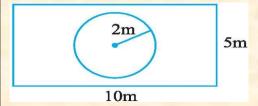
Q2) The following bar graph which shows the number of books sold by a bookstore during five consecutive years:



# On the basis of the given information, answer the following questions:

- a) How many books were sold in 1989?
- **b)** In which year were fewer than 200 books sold?
- c) What will be the difference of number of books sold in 1993 and 1990?

Q3) Siya bought a rectangular lawn with a circular cut in between. She made a flower bed in the circular shape. Find:



On the basis of the given information, answer the following questions:

- a) the area of the whole land
- b) the area of the flower bed
- c) the area of the lawn excluding the area of the flower bed

#### **ASSERTION AND REASONING BASED QUESTIONS**

**DIRECTION**: In the following questions, a statement of **Assertion** (A) is followed by a statement of **Reason** (R). Choose the correct option.

- a) Both Assertion and Reason are true and Reason is a correct explanation of Assertion.
- b) Both Assertion and Reason are true and Reason is not a correct explanation of Assertion.
- c) Assertion is true but Reason is false.
- d) Assertion is false but Reason is true.
- Q1) Assertion (A): The integers on the number line forms an infinite sequence.

**Reason(R)**: A list of numbers following a definite rule which goes on forever is called an infinite sequence.

**Q2)** Assertion (A): Expressions are formed by performing operations like addition, subtraction, multiplication and division on the variables.

**Reason (R)**: 6x - 3 is an expression in variable x.

Q3) Assertion (A): Circumference of a circle of radius r is  $2\pi r$ .

Reason (R): 1760 is the circumference of circle whose radius is 2.8 m

**Q4)** Assertion(A): When the sum of the measures of two angles is 90°, the angles are called complementary angles.

Reason (R): Two acute angles can be complementary to each other.

Q5) Assertion(A): 2/7 is an improper fraction.

Reason (R): In improper fraction numerator is greater than denominator.