

# VASISHTHA GENESIS SCHOOL, BARDOLI

(Academic Session: 2025-26)

<b>Date:</b> _____	<b>Class: 6</b>	<b>Div:</b> _____	<b>Roll No:</b> _____	<b>Sub: Maths</b>
<b>Name:</b> _____			<b>Half yearly Worksheet</b>	

## Objective based worksheet

**Q1. Choose the correct option and answer the following questions:**

(i) Sum of two negative numbers is always

- (a) Positive                      **(b) Negative**                      (c) 0                      (d) 1

(ii) Sum of two positive numbers is always

- (a) Positive**                      (b) Negative                      (c) 0                      (d) 1

(iii) Sum of -36 and 29 is

- (a) -6                      (b) 65                      **(c) -7**                      (d) 7

(iv) Sum of 12 and (-5) is

- (a) - 65                      (b) 65                      (c) -7                      **(d) 7**

(v) Sum of -19 and -21 is

- (a) - 40**                      (b) 40                      (c) 2                      (d) -2

(vi) Which of the following statement is false:

- (a)  $-7 + (-6) = -13$                       **(b)  $-5 + 1 = 4$**                       (c)  $2 + (-1) = 1$                       (d)  $8 + (-9) = -1$

(vii) What integers or number should be added to -5 to get 4?

- (a) -1                      (b) 1                      (c) -9                      **(d) 9**

(viii) What will be the additive inverse of -5?

- (a) 4                      (b) - 6                      (c) 3                      **(d) 5**

(ix) What will be the additive inverse of 7?

- (a) -7**                      (b) - 6                      (c) -4                      (d) -5

(x)  $-8$  \_\_\_\_  $-9$ .

- (a)  $<$                       **(b)  $>$**                       (c)  $=$                       (d) None

(xi) How many integers are there in between  $(-8)$  and  $(-7)$ ?

- (a) 2                      (b) 15                      (c) 1                      **(d) 0**

(xii) Compare:  $(-8) - (-1)$  \_\_\_\_\_  $1 + (-10)$

- (a)  $>$**                       (b)  $<$                       (c)  $=$                       (d) none of these

(xiii) The successor of  $|-50|$  is

- (a) 49                      (b)  $-49$                       (c)  $-51$                       **(d) 51**

(xiv) The absolute value of 25 is

**(a) 25**

(b) 52

(c)  $-25$

(d)  $-52$

(xv) The value of  $12 + 10 + (-10)$

**(a) 12**

(b) 32

(c)  $-12$

(d)  $-42$

(xvi) The number of line(s) of symmetry in a protractor is

(a) **1**

(b) 0

(c) 2

(d) more than 2

(xvii) Out of the digits 0,1,2 and 3, the digit having only one line of symmetry is

(a) 1

(b) 2

(c) 4

**(d) 3**

(xviii) The number of lines of symmetry in a regular hexagon is

(a) **6**

(b) 12

(c) 5

(d) 4

(xix) Which of the following letters of the English alphabet has both horizontal and vertical lines of symmetry?

**(a) X**

(b) R

(c) T

(d) L

(xx) The sum of two consecutive odd numbers is always divisible by \_\_\_\_\_.

(a) 6

(b) 3

**(c) 4**

(d) 10

(xxi) Number \_\_\_\_\_ is neither prime nor composite.

(a) 4

(b) 2

**(c) 1**

(d) 3

(xxii) Mixed Fraction =  $Q + \frac{R}{D}$

**(a)  $\frac{R}{D}$**

(b)  $\frac{Q}{D}$

(c)  $\frac{D}{R}$

(d)  $\frac{D}{Q}$

(xxiii) Which of the following fractions is equal to  $\frac{3}{4}$ ?

(a)  $\frac{2+3}{5+3}$

(b)  $\frac{4+3}{4-3}$

(c)  $\frac{4-3}{4+3}$

**(d)  $\frac{2 \times 3}{5+3}$**

(xxiv)  $\frac{7}{8}$  \_\_\_\_\_  $\frac{7}{10}$ .

(a)  $<$

**(b)  $>$**

(c)  $=$

(d) None

(xxv)  $\frac{3}{4} = \frac{\quad}{28}$ .

(a) 7

**(b) 21**

(c) 6

(d) None

(xxvi) Which of the following is a fraction with numerator  $4 \times 6$  and denominator 19?

(a)  $\frac{42}{19}$

**(b)  $\frac{24}{19}$**

(c)  $\frac{4}{19}$

(d)  $\frac{6}{19}$

(xxvii) The mixed fraction  $4\frac{3}{19}$  to an improper fraction is \_\_\_\_\_.

**(a)  $\frac{79}{19}$**

(b)  $\frac{97}{19}$

(c)  $\frac{76}{19}$

(d)  $\frac{67}{19}$

(xxviii) Which of the following fractions is equal to  $\frac{4}{5}$ ?

(a)  $\frac{16}{25}$

(b)  $\frac{30}{30}$

(c)  $\frac{20}{30}$

**(d)  $\frac{12}{15}$**

(xxix) A \_\_\_\_\_ is a pictorial representation of numerical data in the form of rectangles of equal width and of different heights.

(a) Tally Mark

(b) Pictograph

**(c) Bar Graph**

(d) Pie chart

(xxx) The number of line(s) of symmetry in a ruler is

**(a) 2**

(b) 1

(c) 0

(d) more than 2

(xxxi) Which property is used in  $5 + 2 = 2 + 5$

**(a) Commutative**

(b) Associative

(c) Distributive

(d) None

(xxxii) The sum of two whole numbers is also a \_\_\_\_\_.

**(a) Whole number**

(b) Natural number

(c) Zero

(d) None

(xxxiii) Which property is used in  $5 \times 2 = 2 \times 5$

**(a) Commutative**

(b) Associative

(c) Distributive

(d) None

(xxxiv) Which property is used in  $85 + 0 = 85$

**(a) Additive Identity**

(b) Associative

(c) Multiplicative Identity

(d) None

(xxxv) Which property is used in  $85 \times 1 = 85$

(a) Additive Identity

(b) Associative

**(c) Multiplicative Identity**

(d) None

(xxxvi) An observation occurring \_\_\_\_\_ times in a data is recorded as IIII using tally marks.

(a) 7

(b) 2

**(c) 4**

(d) 11

(xxxvii) \_\_\_\_\_ obtained in the original form is called raw data.

(a) Raw Data

**(b) Data**

(c) frequency

(d) none

(xxxviii) The prime factors of 16 are \_\_\_\_\_.

(a)  $4 \times 4$

(b)  $2 \times 8$

**(c)  $2 \times 2 \times 2 \times 2$**

(d)  $16 \times 1$

(xxxix) Number \_\_\_\_\_ is neither prime nor composite.

(a) 4

(b) 2

**(c) 1**

(d) 3

(xl) Two numbers having only 1 as a common factor are called \_\_\_\_\_ numbers.

(a) prime

**(b) co-prime**

(c) composite

(d) Twin prime

(xli) \_\_\_\_\_ prime numbers whose difference is 2 are called twin primes.

- (a) **Two**                      (b) Three                      (c) One                      (d) Four

(xlii) The smallest even prime number is \_\_\_\_\_.

- (a) **2**                      (b) 3                      (c) 4                      (d) 6

(xliii) A \_\_\_\_\_ of a number is exact divisor of that number.

- (a) twin prime                      (b) multiple                      **(c) factor**                      (d) none

(xliv) Product of two numbers is = \_\_\_\_\_.

- (a) HCF                      (b) LCM                      **(c)  $HCF \times LCM$**                       (d)  $HCF + LCM$

(xlv) A number with more than two factors is called a \_\_\_\_\_ number.

- (a) prime                      (b) natural                      (c) whole                      **(d) composite**

(xlvi) Number of times, a particular observation occurs in a data is called the \_\_\_\_\_ of the observation.

- (a) Graph                      **(b) frequency**                      (c) number                      (d) none

(xlvii) If the bars are drawn on the horizontal line, then the scale of heights of the bars is shown along the \_\_\_\_\_ line.

- (a) vertical**                      (b) horizontal                      (c) slanting                      (d) none

## Q2. Fill in the blanks:

(i) Integer which is neither positive nor negative is **zero**.

(ii) Predecessor of (- 99) is **-100**.

(iii) Successor of (-100) is **-99**.

(iv) A negative integer is always **smaller** than zero.

(v) Zero is **smaller** than every positive integer.

(vi) Every positive number is **greater** than every negative integer.

(vii) An absolute value of an integer is its **numerical** value regardless of its sign.

(viii) The opposite of 15 km east is **15 km west**.

(ix) The number just to the left of -4 is **-5**.

(x) The number just to the right of -1 is **0**.

(xi) The line of symmetry in a circle is **infinite**.

(xii) A square has 4 line of symmetry.

(xiii) A rectangle has 2 line of symmetry.

(xiv) A parallelogram has zero lines of symmetry.

(xv) The mixed fraction of  $\frac{25}{5} + \frac{17}{5}$  is  $8\frac{2}{5}$ .

(xvi)  $12\frac{3}{5}$  as an improper fraction is  $\frac{63}{5}$ .

(xvii) The fraction  $\frac{25}{75}$  in its simplest/lowest form is  $\frac{1}{3}$ .

(xvii) An equivalent fraction of  $\frac{15}{7}$  having denominator 63 is  $\frac{135}{63}$ .

(xviii) Fractions having same denominator are called like fractions.

(xix) Fractions having different denominator are called unlike fractions.

(xx) Fraction in which numerator is greater than denominator is called improper fraction.

(xxi) Fraction in which numerator is less than denominator is called proper fraction.

(xxii)  $\frac{23}{7} = 3\frac{2}{7}$  as a mixed number.

(xxiii) Fraction can be added or subtracted by converting them into like fractions.

(xxiv) The data collected directly from the source is known as raw data.

(xxv) Data can be arranged in a tabular form using tally marks.

(xxvi) A number is divisible by 10 , if the last digit of the number is zero.

(xxvii) The HCF of two co-prime numbers is 1.

(xxviii) The smallest number that must be added to an odd number to make it even is one.

(xxix) A number is divisible by 6, if it is divisible by both 2 and 3.

(xx) A number is divisible by 5 , if its last digit is 0 or 5.

**Q3. State whether the given statement is True or False:**

(i) The mixed fraction of the improper fraction  $\frac{12}{7}$  is  $1\frac{5}{7}$ .

**True**

(ii) The fraction  $\frac{3}{7} = \frac{15}{35}$ .

**True**

(iii) $\frac{13}{7} + \frac{17}{7} = 4\frac{2}{7}$ .	<b>True</b>
(iv) A number which is a multiple of 2 is called an even number.	<b>True</b>
(v) $1 > \frac{2}{3}$ .	<b>True</b>
(vi) $3\frac{2}{3} = \frac{9}{3}$ .	<b>False</b>
(vii) Fractions with the same denominators are called unlike fractions.	<b>False</b>
(viii) The sum of two fractions is always a fraction.	<b>False</b>
(ix) $\frac{1}{4}$ of 16 = 16.	<b>False</b>
(x) Zero is a natural number.	<b>False</b>
(xi) All natural numbers be called whole numbers.	<b>True</b>
(xii) All whole numbers be called natural numbers.	<b>False</b>
(xiii) Every even number except 2 is a composite number.	<b>True</b>
(xiv) A number which is a multiple of 2 is called an odd number.	<b>False</b>
(xv) Two numbers whose HCF is 1, are called prime numbers.	<b>False</b>
(xvi) The smallest prime number is 1.	<b>False</b>
(xvii) A number is divisible by 2 , if its last digit is even.	<b>True</b>
(xviii) The prime factors of 24 are 2 x 6 x 2.	<b>False</b>
(xix) HCF stand for Greatest common divisor.	<b>True</b>
(xx) The 5 <sup>th</sup> multiple of 20 is 100.	<b>True</b>
(xxi) A circle has an infinite number of lines of symmetry.	<b>True</b>
(xxii) An equilateral triangle has three lines of symmetry.	<b>True</b>
(xxiii) The letter 'A' has a vertical line of symmetry.	<b>True</b>