VASISHTHA GENESIS SCHOOL, BARDOLI

(Academic Session: 2025-26)

Date: _____	Class: 6	Div: _____	Roll No: _____	Sub: Maths
Name: _____			PT- 4 Worksheet (CH- 17 & 18)	

Objective based worksheet

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

i. A symbol having a fixed value is called_____.

(a) Variable **(b) Constant** (c) Algebra (d) None

ii. Two times a number plus 5 will be _____.

(a) 5x + 5 **(b) 2x + 5** (c) 2x – 5 (d) 2x angle

iii. Terms having same algebraic expression are called _____terms.

(a) Like (b) Unlike (c) Polynomial (d) None

iv. An expression with only one term is called_____.

(a) Binomial **(b) Monomial** (c) Trinomial (d) Polynomial

v. The quotient of *a* and *b* added to the product of a and b is written as_____.

(a) a +ab (b) $\frac{a}{ab}$ **(c) $\frac{a}{b}$ + ab** (d) a +b

vi. The expression x + y - z is _____.

(a) Binomial (b) Monomial **(c) Trinomial** (d) Polynomial

vii. If Isha's present age is N years, then her age after 10 years ago was_____

(a) (N-10) **(b) (N+10)** (c) 10N (d) (10÷N)

viii. The ratio of Rs 6 to 60 paise is _____

(a) 1:10 **(b) 10:1** (c) 1:1 (d) 100:1

ix. . If x : 5 :: 12 : 60 are in proportion, than the value of x will be _____.

(a) 4 **(b) 1** (c) 6 (d) 2

x. The ratio of 10 copies to 60 copies is _____.

(a) 1 : 6 (b) 6 : 1 (c) 4 : 5 (d) 5 : 4

xi. Which of the following ratios is equivalent to 12 : 15?

(a) 4 : 5 (b) 5 : 4 (c) 6 : 9 (d) 9 : 12

xii. The ratio of 50 minutes to 2 hours is _____

(a) 7 : 5 **(b) 5 : 12** (c) 12 : 5 (d) 5 : 7

xiii. The ratio 3 cm to 3 mm is___

(a) 1 : 1 (b) 1 : 10 **(c) 10 : 1** (d) none

xiv. The ratio can be expressed as _____.

(a) Product **(b) Fraction** (c) Quotient (d) Sum

xv. In proportion first and fourth terms are known as _____.

(a) Middle (b) means **(c) extremes** (d) last

xvi. If a : b :: c : d, then

(a) ad = bc (b) ab = cd (c) ac = bd (d) None

xvii. The ratio of two numbers X and Y is written as_____.

(a) X x Y **(b)** $\frac{X}{Y}$ (c) X – Y (d) None

xviii. Equality of two ratio is called _____.

(a) Proportion (b) ratio (c) continued proportion (d) none

xix. The second and third terms of a proportion are known as _____ terms.

(a) Last **(b) means** (c) extremes (d) None

xx. Symbol _____ represent proportion.

(a) : **(b) : :** (c) % (d) None

Q2. Fill in the blanks:

i. The lowest form of 25 :75 is **1 : 3**.

ii. Cost of 2 copies is 25 Rs. Then cost of 10 copies is **125**.

iii. The first and the fourth terms of a proportion is called **Extreme terms.**

iv. The second and the third terms of a proportion is called **Mean terms**.

v. In a class 20 girls and 30 boys are there, then the ratio of number of boys to total girls will be **3 : 2**.

vi. The ratio can be expressed as **fraction**.

vii. If a, b, c are in continued proportion then b^2 = **ac**.

viii. The ratio of 4 Rs and 25 paise will be **16 : 1**

ix. Two ratio are equivalent, if fractions corresponding to them are **equal**.

x. The coefficient of x in expression 8 – x + y is **-1**.

xi. The value of a variable is **not fixed**.

xii. 17 is subtracted from (-y) = $-\mathbf{y}-\mathbf{17}$.

xiii. A symbol having a fixed numerical value is called **constant.**

xiv. In equation x + 5 = 2, the value of x is $\mathbf{-3}$.

xv. The coefficient of x is **31** in the given expression $31x$.

xvi. A **variable** is a symbol used to represent an unknown number.

xvii. The expression for 3x is subtracted from 20 is $\mathbf{20-3x}$.

xvii. The expression for the statement: the sum of three times of x and 11 is **3x + 11**.

Q3. State whether the given statement is true or false:

i. In the expression 3y −5x, terms are 3y and 5x. **False**

ii. A ratio is always be greater than 1. **False**

iii. Ratio of 2 hours to 15 min is 8 : 1 . **True**

iv. 2 : 3 and 8 : 10 do not form a proportion. **True**

v. If a, b, c, d are in proportion, then b : a = c : d. **False**

vi. If a x d = b x c , then a, b, c, d are in proportion. **True**

vii. 8 : 3 is equal to 3 : 8. **False**

viii. 3a is equal to a × a × a. **False**

ix. 20 – 3x means 3x is subtracted from 20. **False**

x. Equality of two ratio is called fraction. **False**

xi. The second and third terms of a proportion are known as middle terms. **True**

xii. If thrice of a number is 15, the number will be 3. **False**

xiii. 50 more than x = x + 50. **True**

xiv. Half of x = 2x. **False**

xv. a + a + a + a = 4a. **True**