Grade : VII	Subject : Maths	Section:
Name:	Practice Worksheet	Date:
SYLLABUS CH- 1 Integers CH-2 Fractions CH-3 Decimals CH-4 Rational Numbers CH -5 Operation on rational numbers CH-6 Exponents and Powers CH-7 Algebraic Expressions CH-8 Simple Equations CH-11 Lines And angles CH-18 Visualising solid shapes	EMPOWER- I	Empower-1-80 Marks PT-1(Written)-10 Marks SubjectEnrichment-5 Marks NotebookSubmission-5 Marks

## Q1. Very short question.

- 1. The sum of two integers is -123. If one of the integer is -73, find the other
- 2. What is additive inverse of (-6)?
- 3. Find  $\frac{2}{5}$  of a rupee.
- 4. Find  $\frac{11}{25}$  of a kilogram.
- 5. Arrange the following in ascending order.

- 6. Express in the standard form (i)  $\frac{-39}{24}$ .
- 7. Multiply  $(\frac{-2}{9})$  by (-5).
- 8. Multiply (-3) by  $\frac{3}{11}$ .
- 9. Divide  $\frac{-8}{3}$  by 4.
- 10. Divide  $\frac{-15}{10}$  by  $\frac{5}{8}$ .
- 11. Express in the form  $\frac{p}{q}$ :  $\left(\frac{-2}{5}\right)^3$ .
- 12. Express in the form  $\frac{p}{q}: \left(\frac{-3}{7}\right)^2$
- 13. Simplify:  $\left(\frac{-3}{17}\right)^{-1} \times \left(\frac{-17}{4}\right)^{-1}$
- 14. Write the following statement as an equation:
  - (a) One fourth of a number x added to 6 gives 9.
  - (b) Four subtracted from one sixth of p gives 12.

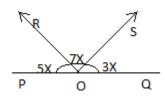
## **Q2. Short question.**

1. Find the product using suitable properties

- (a)  $18 \times (-25) \times (-8) \times 5$
- (b)  $(-39)\times(-15)+(-1)\times39$
- 2. Divide : (i)  $48 \div \frac{8}{9}$  (ii)  $2\frac{2}{9} \div 1\frac{2}{3}$
- 3. The cost of  $4\frac{1}{4}$  kg of sugar is 68 rupees.find the cost of 1 kg of sugar.
- 4. Rashmi cuts 90m of cloth into equal pieces of length 1.2m. How many pieces does she get?
- 5. Represent the following rational numbers on the number line: (1)  $\frac{-9}{5}$  (2)  $\frac{-13}{7}$
- 6. What should be added to  $\left[\frac{-3}{5} + \left(\frac{-5}{3}\right)\right]$  to get 1?
- 7. Simplify  $\left(\frac{16}{10} \times \frac{15}{9}\right) + \left(\frac{-8}{27} \times \frac{9}{2}\right)$
- 8. Write down the coefficient of y in each of the following.
  - (1)  $7 \frac{5}{2}y$  (2) 15xy
- 9. Write down the coefficient of x in each of the following

  - (1)  $7 \frac{3}{12}x$  (2)  $\frac{-7}{3}xy + 7$
- 10. Identify the like terms in the following

  - (1) -5xy,  $3xy^2$ ,  $3x^2y$  (2)  $4x^2y$ ,  $3xy^2$ ,  $6b^2z$ ,  $-8bz^2$
- 11. Find the value of x.



- 12. solve the following equation and check the result.

  - (1)  $2x \frac{1}{2} = -\frac{1}{2}$  (2) 12p-12 = 36

## Q3. Long question.

- $: (-18) \times [(-3) + (-5)] = [(-18) \times (-3)] + [(-18) \times (-5)]$
- 2. Simplify: (a)  $[(-49) \div 7] \div 7$
- (b)  $[(-11)+(-5)]\div[3+(-1)]$
- 3. A rectangular field is  $15\frac{2}{3}$  m long and  $12\frac{4}{5}$ m wide. Find its perimeter and area.
- 4. There are 48 students in a class and  $\frac{2}{3}$  of them are boys. Howmany girls are there in the class?
- 5. Divide the sum of the fraction  $\frac{6}{7}$  and  $\frac{8}{9}$  by their difference.
- 6. List any six rational number between (-3) and (-4).
- 7. Arrange the following in ascending order.
  - $(1)\frac{3}{5},\frac{-2}{3},0,\frac{1}{2},\frac{-7}{6}$
  - $(2)\frac{-12}{15},\frac{-6}{10},\frac{-3}{20},\frac{7}{-40}$
- 8. Arrange the following in descending order.
  - $(1)\frac{2}{-9},\frac{-4}{3},\frac{7}{12},\frac{-5}{18}$

$$(2)$$
 -4,  $\frac{-4}{5}$ ,  $\frac{9}{-4}$ ,  $\frac{7}{5}$ 

9. Simplify:

$$\tfrac{25\times5^2\times x^8}{10^3\times x^5}$$

10. Solve the equation :3(X-5) = -21

11. Solve the equation:  $\frac{2X-1}{3} = \frac{X-2}{3}$ 

## Q4. Very long question.

1. Simplify (a) 
$$\frac{5}{9} + \frac{7}{3}$$

(b) 
$$\frac{7}{9} - \frac{2}{3}$$

(c) 
$$5\frac{1}{6} - 3\frac{1}{4} + 2\frac{1}{3}$$

2. (a) Add : (i) 0.05 and 0.004 (ii) 14.44, 6.234 and 18

(b)Subtract : (i)23.8 -0.25

(ii) 8.5-2.783

3. Evaluate: (i)  $234.05 \times 100$ 

Divide (i) 6.5 by 10 (ii) 233.7 by 100

4. Simplify:  $\left(\frac{2^7}{2^3}\right) \times 2^5$ 

5. (a)Simplify:  $(3^{20} \div 3^{15}) \times 3^3$ 

(b)Express in exponential form:  $\frac{32}{243}$ 

6. Simplify;  $\left[\left(\frac{1}{2}\right)^2\right]^3 \times \left(\frac{1}{3}\right)^{-4} \times 3^{-2} \times \frac{1}{6}$ 

7. (a) Write the number appearing in the following statement in the standard form:

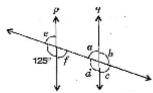
Mass of the earth is 5,976,000,000,000,000,000,000,000 kg.

(b) Write in expanded form: (1) 62859 (2) 831289

(c) Write in the standard form: (1) 18,00,000 (2) 5692.056

(d) Write the following number in the usual form: (1)  $4.356 \times 10^{7}$ (2)  $9.863 \times 10^{12}$ 

8. In the given figure  $p \parallel q$  find the unknown angles.



- 9. The sum of four consecutive even number is 156.find the numbers.
- 10. The sum of present ages of Anil and his father is 54 years .Six years ago, Anil's father was six times as old as Anil. Find their present ages.

11. Priyanka subtracts thrice the number of apples she has from 65. She finds the result to be 14.

How many apples does she have?

12. Draw a cylinder and answer the following: (a)A cylinder has \_\_\_\_\_ vertex/ vertices

(b)A cylinder has \_\_\_\_ curved edge/edges

(c)It has curved surface/ surfaces and flat faces.