DISTRICT PUBLIC SCHOOL & COLLEGE DEPALPUR

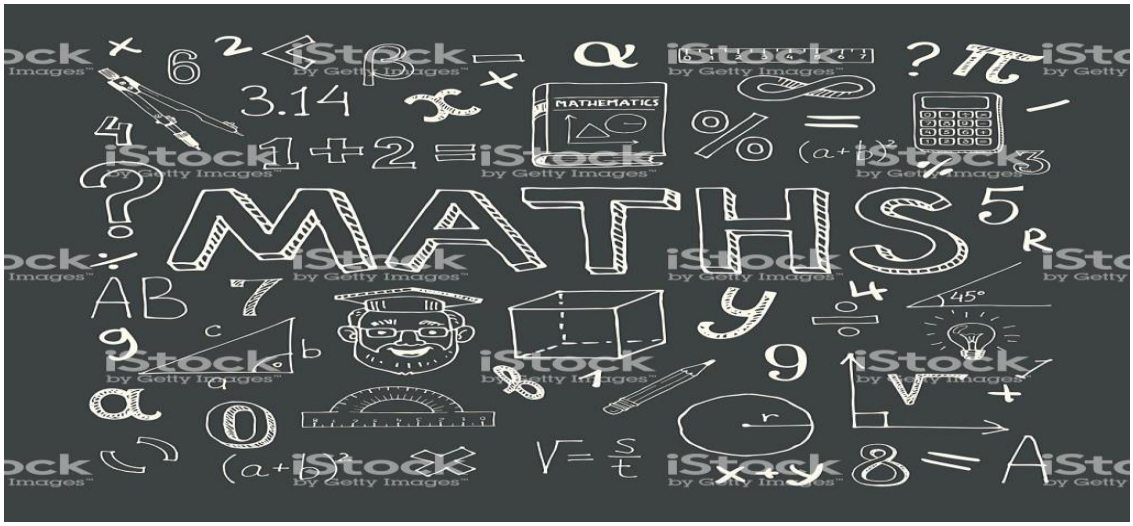
SUMMER VACATION HOME TASK

WITH ASSIGNMENTS AND WORKSHEETS

1ST SEMESTER

Academic Session (2021-2022)

1st July,2021 to 1st August,2021



Subject: Mathematics

Class: Seven

STUDENT'S NAME:---------- FATHER'S NAME:----------

CLASS:---------- SECTION:----------

TOTAL MARKS:---------- OBTAINED MARKS----------

CLASS TEACHER NAME AND SIGN----------

SECTION HEAD'S SIGN---------- PRINCIPAL'S SIGN----------

Parent's Sign:_____

District Public School & College Depalpur

Block Syllabi Session 2021-2022

Book: Mathematics (PCTB)

Class: 7th **System of Studies: Semester System**

Subject	1st Semester
Mathematics	**Unit: 1,2,3,4,5,7** **Unit 1:Exercise 1.1,1.2,1.3,1.4(Q 5,6,7)** **Unit 2: Exercise 2.1,2.2,2.3** **Unit 3: Exercise 3.1,3.2** **Unit 4: Exercise 4.1,4.3(Q 1,3) odd parts (Q 2) even parts,4.4(Q 1) odd parts (Q 2) even parts** **Unit 5: Exercise 5.1,5.2(Q 1,2,3,4) odd parts** **Unit 7: Exercise 7.1,7.2,7.3**

Note : MCQs and Fill in blanks also included of all units

Parent's Sign:_____

Date: 1st July,2021 **Day: Thursday**

Topic: Forms of set

Objectives:Enable to learn about forms of set

Unit 1

Sets

Exercise 1.1

Define set with atleast two examples.

Ans :

_____

_____

_____

_____

_____

_____

1. Write the following sets in descriptive form.

(i) A = {*a, e, i, o, u*)

Sol:

(ii) B = {3, 6, 9, 12, ...}

Sol:

2. Write the following sets in tabular form.

(i) A = Letters of the word "hockey"

Sol:

Parent's Sign:_____

(ii) B = Two colours in the rainbow

Sol:

Learn and write table5

5×1=5	
5×2=10	
5×3=15	
5×4=20	
5×5=25	
5×6=30	
5×7=35	
5×8=40	
5×9=45	
5×10=50	
5×11=55	
5×12=60	

Parent's Sign:_____

Work Sheet

1. Which of the following are sets? Justify your answer.

(a) The collection of all the days in a week beginning with the letter 'T'.

(b) The collection of all difficult questions in the chapter on sets.

(c) The collection of girls in your class.

(d) The collection of all rivers in India.

(e) The collection of all active teachers in the school.

(f) The collection of all integers more than -3.

(g) The collection of all beautiful flowers in the park.

2. If,

$A = \{3, 5, 7, 9\}$

$B = \{2, 4, 6, 8, 10\}$

$C = \{12, 14, 18, 20, 24\}$

$D = \{21, 26, 31, 36\}$

(a) State whether true or false.

(i) $13 \in C$

(ii) $6 \notin A$

(ii) $9 \notin A$

(iv) $24 \in C$

(v) $31 \in D$

(vi) $36 \notin D$

(vii) $20 \notin C$

(viii) $9 \in A$

(b) Fill in the blanks.

(i) $3 \in$ ___

(ii) 4 ___ B

(iii) 26 ___ C

(iv) $8 \in$ ___

(v) 5 ___ A

(vi) 6 ___ C

(vii) 21 ___ D

(viii) 18 ___ B

Parent's Sign:_____

Date: 2nd July,2021 **Day: Friday**

Topic: Properties of sets

Objectives: Enable to solve Exercise

Exercise 1.2

1. If X = {1, 2, 3, ..., 10}, Y = {2, 4, 6, 8, 12} and Z = {2, 3, 5, 7, 11}, then find: X U (Y U Z)

2. If R = {0, 1, 2, 3}, S = [0, 2, 4) and T = {1, 2, 3, 4}, then find:

(i) R \ S **(ii) T \ S**

(iii) R \ T

Parent's Sign:_____

Learn and write table of 6

6×1=6	
6×2=12	
6×3=18	
6×4=24	
6×5=30	
6×6=36	
6×7=42	
6×8=48	
6×9=54	
6×10=60	
6×11=66	
6×12=72	

Date: 3rd July,2021 **Day: Saturday**

Topic: Types of sets

Objectives: Enable to know about types of sets

Exercise # 1.3

1. Look at each pair of sets to separate the disjoint and overlapping sets.

(i) **A = {*a, b, c, d, e*}, B = {*d, e, f, g, h*}**

Parent's Sign:_____

(ii) **L = {2, 4, 6, 8, 10}, M = {3, 6, 9, 12}**

(iii) **P = Set of Prime numbers, C = Set of Composite numbers**

(iv) **E = Set of Even numbers, O = Set of Odd numbers**

2. If U= {1, 2, 3, ..., 20}, A= {1, 3, 5, ... ,19} and B = {2, 4, 6, ... ,20}, then prove that: B' = A

Learn and write table of 7

7×1=7	
7×2=14	
7×3=21	
7×4=28	
7×5=35	
7×6=42	
7×7=49	
7×8=56	
7×9=63	
7×10=70	
7×11=77	
7×12=84	

Date: 5th July,2021 **Day: Monday**

Topic: Complement of Set

Objectives: Enable to learn about complement of set

Exercise # 1.3

3. If U = set of integers and W = set of whole numbers, then find the complement of set W.

Parent's Sign:_____

4. If U = set of natural numbers and P = set of prime numbers, then find the complement of set P.

Learn and write table of 8

8×1=8	
8×2=16	
8×3=24	
8×4=32	
8×5=40	
8×6=48	
8×7=56	
8×8=64	
8×9=72	
8×10=80	
8×11=88	
8×12=96	

Parent's Sign:_____

Date: 6th July,2021 **Day: Tuesday**

Topic: Properties of sets

Objectives: Enable to solve exercise

Exercise 1.4

3. If A = {1, 7, 9, 11}, B = {1, 5, 9, 13}, and C = {2, 6, 9, 11},then verifythat:
(i) A - B ≠ B – A **(ii) A - C ≠ C - A**

4. If U = {0, 1, 2,....,15}, L = {5, 7, 9,....,15}, and M = {6, 8, 10, 12, 14},then verify the identity properties with respect to union an intersection of sets.

Parent's Sign:_____

Learn and write table of 9

9×1=9	
9×2=18	
9×3=27	
9×4=36	
9×5=45	
9×6=54	
9×7=63	
9×8=72	
9×9=81	
9×10=90	
9×11=99	
9×12=109	

Date: 7th July,2021 **Day: Wednesday**

Topic: Review Exercise

Objectives: Enable to solve Review Exercise

Review Exercise

1. Fill in the blanks.

(i) The symbol " ^ " means _____.

(ii) The set consisting of only common elements of two sets is called the _____ of two sets.

(iii) A set which contains all the possible elements of the sets under consideration is called the _____ set.

Parent's Sign:_____

(iv) Two sets are called _____ if there is at least one element common between them and non of the sets is subset of the other.
(v) In sets, the universal set acts as _____ for intersection.

2.Tick (✓) the correct answer.

i- To write an empty set, we use the symbol:

(a) U (b) ϕ (c) ^ (d) \

ii- The complement of a set A can be written as:

(a)B\A (b)A ‘ (c) n(A) (d) A

iii- If A= {1,2} and B= {a,b},then A ∩ B = ____

(a) {1,2} (b) {a,b} (c) {1,2,a,b} (d) { }

iv- If A= {1,3} and B= {1,2,3},then A U B =____

(a) {1,2,3} (b) {1} (c) { } (d) {1,3}

v- “B difference A” is represented by :

(a) A-B (b) A B (c) B \ A (d) A U B

vi- A’ U A = --------

(a) U (b) ϕ (c) A (d) A’

Learn and write table of 10

10×1=10	
10×2=20	
10×3=30	

Parent’s Sign:_____

10×4=40	
10×5=50	
10×6=60	
10×7=70	
10×8=80	
10×9=90	
10×10=100	
10×11=110	
10×12=120	

Date: 8th July,2021 **Day: Thursday**

Topic: Number Line

Objectives: Enable to represent rational numbers on number line

Unit 2

Rational Numbers

Exercise # 2.1

1. Write "T" for a true and "F" for a false statement.

(i) Positive numbers are rational numbers.
(ii) "0" is not a rational number.
(iii) An integer is expressed in form.
(iv) Negative numbers are not rational numbers.
(v) In any rational number q can be zero.

2. Represent each rational number on the number line.

(i) $-\frac{5}{2}$

Parent's Sign:_____

(ii) $\frac{2}{3}$

(iii) $1\frac{4}{5}$

(iv) $-2\frac{3}{4}$

Parent's Sign:_____

Learn and write table of 11

11 X 1 = 11	
11 X 2 = 22	
11 X 3 = 33	
11 X 4 = 44	
11 X 5 = 55	
11 X 6 = 66	
11 X 7 = 77	
11 X 8 = 88	
11 X 9 = 99	
11 X 10 = 110	
11 X 11 = 121	
11 X 12 = 132	

Parent's Sign:_____

Date: 9th July,2021 **Day: Friday**

Topic: Multiplicative and Additive inverse

Objectives: Enable to find inverse

Exercise # 2.2

1 .Find the additive inverse and multiplicative inverse of the following rational numbers

i. -7

ii. 23

iii. -11

iv. $\frac{1}{3}$

Learn and write table of 12

12 X 1 = 12	
12 X 2 = 24	
12 X 3 = 36	
12 X 4 = 48	

Parent's Sign:_____

12 X 5 = 60	
12 X 6 = 72	
12 X 7 = 84	
12 X 8 = 96	
12 X 9 = 108	
12 X 10 = 120	
12 X 11 = 132	
12 X 12 = 144	

Date: 10th July,2021 **Day: Saturday**

Topic: Simplification

Objectives: Enable to simplify questions

Exercise # 2.2

2. Simplify the following.

i. $\mathbf{1 + (\frac{49}{50})}$ **ii.** $\mathbf{1 + \frac{11}{100}}$

Parent's Sign:_____

iii. $-\frac{3}{4}-\frac{5}{6}-(-\frac{17}{8})$

iv. $\frac{1}{11}+\frac{11}{10}+(-\frac{22}{5})$

Learn and write table of 13

13 X 1 = 13	
13 X 2 = 26	
13 X 3 = 39	
13 X 4 = 52	
13 X 5 = 65	
13 X 6 = 78	
13 X 7 = 91	

Parent's Sign:_____

13 X 8 = 104	
13 X 9 = 117	
13 X 10 = 130	
13 X 11 = 143	
13 X 12 = 156	

Date: 12th July,2021 **Day: Monday**

Topic: Use of greater and lesser sign

Objectives: Enable to solve exercise

Exercise # 2.3

1 .Put the correct sign > , < or = between the following pairs of rational numbers.

i. $\frac{1}{2}, \frac{15}{20}$

ii. $\frac{2}{-3}, \frac{1}{6}$

iii. $\frac{4}{9}, \frac{6}{-7}$

iv. $\frac{-8}{11}, \frac{3}{-10}$

Parent's Sign:_____

2. Arrange the following rational numbers in descending order.

i. $\frac{1}{2}, \frac{2}{3}, \frac{8}{9}$

ii. $\frac{1}{6}, \frac{3}{4}, \frac{1}{2}$

Learn and write table of 14

14 X 1 = 14	
14 X 2 = 28	

Parent's Sign:_____

14 X 3 = 42	
14 X 4 = 56	
14 X 5 = 70	
14 X 6 = 84	
14 X 7 = 98	
14 X 8 = 112	
14 X 9 = 126	
14 X 10 = 140	
14 X 11 = 154	
14 X 12 = 168	

Parent's Sign:_____

Worksheet

Name : _____ Score : _____

Teacher : _____ Date : _____

Write the Correct Comparison Symbol (>, < or =) in Each Box

1)	$\frac{7}{8}$	☐	0.825	11)	$\frac{1}{2}$	☐	0.625
2)	$\frac{4}{6}$	☐	0.667	12)	$\frac{1}{8}$	☐	0.1
3)	$\frac{5}{6}$	☐	0.708	13)	$\frac{5}{8}$	☐	0.625
4)	$\frac{2}{3}$	☐	0.667	14)	$\frac{4}{5}$	☐	0.95
5)	$\frac{2}{4}$	☐	0.4	15)	$\frac{3}{4}$	☐	0.875
6)	$\frac{1}{2}$	☐	0.5	16)	$\frac{3}{4}$	☐	0.625
7)	$\frac{1}{2}$	☐	0.6	17)	$\frac{2}{5}$	☐	0.4
8)	$\frac{4}{6}$	☐	0.717	18)	$\frac{6}{8}$	☐	0.825
9)	$\frac{4}{5}$	☐	0.65	19)	$\frac{2}{3}$	☐	0.592
10)	$\frac{2}{3}$	☐	0.667	20)	$\frac{2}{3}$	☐	0.692

Date: 13th July,2021 **Day: Tuesday**

Topic: Ascending and descending order

Objectives: Enable to arrange rational numbers

Parent's Sign:_____

Exercise # 2.3

3.Arrange the following rational numbers in ascending order.

i. $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$

ii. $\frac{4}{5}, \frac{1}{10}, \frac{2}{15}$

4. Prove that.

i. $\frac{3}{5} + \left(\frac{1}{2} + \frac{7}{10}\right) = \left(\frac{3}{5} + \frac{1}{2}\right) + \frac{7}{10}$

vi. $\frac{1}{-2} + \left(\frac{3}{5} + \frac{1}{4}\right) = \left(\frac{1}{-2} + \frac{3}{5}\right) + \frac{1}{4}$

vii. $\frac{2}{3} \times \left(\frac{1}{2} + \frac{5}{6}\right) = \left(\frac{2}{3} \times \frac{1}{2}\right) + \left(\frac{2}{3} \times \frac{5}{6}\right)$

viii. $\frac{1}{4} \times \left(\frac{8}{9} - \frac{12}{15}\right) = \left(\frac{1}{4} \times \frac{8}{9}\right) - \left(\frac{1}{4} \times \frac{12}{15}\right)$

Learn and write table of 15

15 X 1 = 15	
15 X 2 = 30	

Parent's Sign:_____

15 X 3 = 45	
15 X 4 = 60	
15 X 5 = 75	
15 X 6 = 90	
15 X 7 = 105	
15 X 8 = 120	
15 X 9 = 135	
15 X 10 = 150	
15 X 11 = 165	
15 X 12 = 180	

Date: 14th July,2021 **Day: Wednesday**

Topic: Review Exercise

Objectives: Enable to solve review exercise

Review Exercise

1 . Tick (✓) the correct answer.

i- A number that can be expressed in the form of p/q ,wherep,q ϵ z,q ≠ 0 is called:

Parent's Sign:_____

(a) integer (b) rational number (c) whole number (d) all

ii-The additive inverse of 2/3 is:

(a) -2/3 (b) 3/2 (c) 1/3 (d) -3/2

iii- The multiplicative inverse of -4/7 is:

(a) 4/7 (b) 7/4 (c) -7/4 (d) 1/7

iv- 1/3 + 1/2 = _____:

(a) 1/5 (b) 1/6 (c) 2/5 (d) 5/6

v- 2/5 ÷ (-4/5) = _____:

(a) 2 (b) -2 (c) -1/2 (d) ½

2 . Fill in the blanks.

(i) The_____ consists of fractions as well as integers.

(ii) The rational numbers and are called____ inverse of each other.

(iii) A number that can be expressed in the form of wherep and q are integers and q ,q≠ 0 is called the_____number.

(iv) 0 is called additive identity whereas 1 is called _____identity.

(v) The rational number 0 has no _____ .

(vi) The _____ inverse of a rational number is its reciprocal.

Learn and write table of 16

16 X 1 = 16	
16 X 2 = 32	
16 X 3 = 48	

Parent's Sign:_____

16 X 4 = 64	
16 X 5 = 80	
16 X 6 = 96	
16 X 7 = 112	
16 X 8 = 128	
16 X 9 = 144	
16 X 10 = 160	
16 X 11 = 176	
16 X 12 = 192	

Date: 15th July,2021 **Day: Thursday**

Topic: Decimals

Objectives: Enable to convert decimals into rational numbers

Unit 3

Decimals

Exercise 3.1

1. Convert the following decimals into rational numbers.

i. 0.36 **ii. 0.75**

Parent's Sign:_____

iii. -0.125 **iv. -6.08**

Learn and write table of 17

17 X 1 = 17	
17 X 2 = 34	
17 X 3 = 51	
17 X 4 = 68	
17 X 5 = 85	
17 X 6 = 102	
17 X 7 = 119	

Parent's Sign:_____

17 X 8 = 136	
17 X 9 = 153	
17 X 10 = 170	
17 X 11 = 187	
17 X 12 = 204	

Date: 16th July,2021 **Day: Friday**

Topic: Terminating and non terminating decimals

Objectives: Enable to separate Terminating and non terminating decimals

Exercise # 3.2

1. Without actual division, separate the terminating and non-terminating decimals.

i. $\frac{13}{8}$ **ii.** $\frac{7}{25}$

iii. $\frac{8}{3}$ **iv.** $\frac{5}{11}$

Parent's Sign:_____

2.Express the following rational numbers in terminating decimals.

v. $\frac{5}{1000}$ **ii.** $\frac{20}{8}$

vii. $\frac{21}{6}$

Learn and write table of 18

18 X 1 = 18	
18 X 2 = 36	

Parent's Sign:_____

18 X 3 = 54	
18 X 4 = 72	
18 X 5 = 90	
18 X 6 = 108	
18 X 7 = 126	
18 X 8 = 144	
18 X 9 = 162	
18 X 10 = 180	
18 X 11 = 198	
18 X 12 = 216	

Date: 17th July,2021 **Day: Saturday**

Topic: Decimal places and round off

Objectives: Enable to solve exercise

Exercise # 3.2

3.Express the following rational numbers into non.terminating decimals upto three decimal places.

Parent's Sign:_____

i. $\frac{4}{3}$ **ii.** $\frac{2}{7}$

iii. $\frac{5}{11}$ **iv.** $\frac{8}{13}$

4. Round off the following decimals upto three decimal places.

i. 5.41679 **ii. 11.10365**

iii. 0.92517 **iv. 3.10351**

v. 0.74206 **vi. 23.15147**

Parent's Sign:_____

Learn and write table of 19

19 X 1 = 19	
19 X 2 = 38	
19 X 3 = 57	
19 X 4 = 76	
19 X 5 = 95	
19 X 6 = 114	
19 X 7 = 133	
19 X 8 = 152	
19 X 9 = 171	
19 X 10 = 190	
19 X 11 = 209	
19 X 12 = 228	

Parent's Sign:_____

Date: 19th July,2021 **Day: Monday**

Topic: Review Exercise

Objectives: Enable to solve review exercise

Review Exercise

1. Tick (✓) the correct answer.

i- Two separate a whole number from fractional part in a decimal, we use the symbol:

(a) - (b) . (c) % (d) /

ii- If we round off the decimal 3.7461 upto two decimal places,we get:

(a) 3.74 (b) 3.7 (c) 3.84 (d) 3.75

iii- A rational number is terminating decimal, if its denominator has no prime factor other than:

(a) 2 & 3 (b) 3 & 5 (c) 2 & 5 (d) 2 & 7

iv- When we change 0.25 to the rational number,we get:

(a) 1/2 (b) 1/3 (c)1/4 (d) 1/7

2. Fill in the blanks.

(i) A _____ decimal may be recurring or non-recurring.

(ii) Two parts of decimal number separated by a dot is called the _____ .

(iii) In terminating decimals, division _____ after a finite number of steps.

(iv) In decimals, the term round off is used to leave the digits after the _____ .

Parent's Sign:_____

(v) A fraction will be terminating if the _____ has 2 or 5 or both as factors.

Learn and write table of 20

20 X 1 = 20	
20 X 2 = 40	
20 X 3 = 60	
20 X 4 = 80	
20 X 5 = 100	
20 X 6 = 120	
20 X 7 = 140	
20 X 8 = 160	
20 X 9 = 180	
20 X 10 = 200	
20 X 11 = 220	
20 X 12 = 240	

Parent's Sign:_____

Date: 20th July,2021 **Day: Tuesday**

Topic: Exponents

Objectives: Enable to identify exponent and base

Unit 4

Exponents

Exercise # 4.1

1. Identify the exponent and base in each of the following.

i- $(-1)^9$ **ii-** $(2)^{100}$ **iii-** $(-19)^{22}$

iv- $(3)^5$ **v-** $(ab)^n$ **vi-** $(\frac{-6}{11})^8$

3. Prove that:

i- $(5)^3 = 125$ **ii-** $(-1)^{11} = -1$ **iii-** $(-3)^5 = -243$

iv- $(\frac{3}{7})^2 = \frac{9}{49}$ **v-** $(-\frac{1}{8})^3 = -\frac{1}{512}$

Parent's Sign:_____

Learn and write table of 11

11 X 1 = 11	
11 X 2 = 22	
11 X 3 = 33	
11 X 4 = 44	
11 X 5 = 55	
11 X 6 = 66	
11 X 7 = 77	
11 X 8 = 88	
11 X 9 = 99	
11 X 10 = 110	
11 X 11 = 121	
11 X 12 = 132	

Date: 26th July,2021 **Day: Monday**

Topic: Exponent

Parent's Sign:_____

Objectives: Enable to solve exercise

Exercise # 4.1

4. Express each rational number using an exponent.

i- 121 **ii- 81**

iii- -625 **iv-** $\frac{1}{1000}$

Learn and write table of 12

12 X 1 = 12	
12 X 2 = 24	
12 X 3 = 36	
12 X 4 = 48	
12 X 5 = 60	

Parent's Sign:_____

12 X 6 = 72	
12 X 7 = 84	
12 X 8 = 96	
12 X 9 = 108	
12 X 10 = 120	
12 X 11 = 132	
12 X 12 = 144	

Parent's Sign:_____

Name: _____ Date: _____

Exponents Worksheet

Write using exponents. For example, $8 \times 8 \times 8$ is written as 8^3. You don't have to solve.

1 a. $9 \times 9 \times 9 \times 9 \times 9 \times 9 \times 9 \times 9 \times 9$

2 a. $64 \times 64 \times 64 \times 64 \times 64 \times 64 \times 64 \times 64 \times 64$

3 a. $4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4$

4 a. $100 \times 100 \times 100 \times 100 \times 100$

5 a. 1×1

6 a. $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$

7 a. $95 \times 95 \times 95$

8 a. 7×7

9 a. $1 \times 1 \times 1 \times 1 \times 1 \times 1$

10 a. $2 \times 2 \times 2 \times 2$

Date: 27th July,2021 **Day: Tuesday**

Topic: Exponent

Objectives: Enable to solve exercise

Exercise # 4.3

Parent's Sign:_____

1. Simplify

i- $2^7 \div 2^2$ **ii-** $(-9)^{11} \div (-9)^8$ **iii-** $3^4 \div 5^4$

iv- $(m)^3 \div (n)^3$ **v-** $(a)^7 \div (a)^2$ **vi-** $(b)^p \div (b)^q$

2. Prove that

i- $2^4 \div 7^4 = (\frac{2}{7})^4$ **ii-** $-4^3 \div 5^3 = (\frac{-4}{5})^3$ **iii-** $3^8 \div 3 = 3^7$

Learn and write table of 13

13 X 1 = 13	
13 X 2 = 26	
13 X 3 = 39	

Parent's Sign:_____

13 X 4 = 52	
13 X 5 = 65	
13 X 6 = 78	
13 X 7 = 91	
13 X 8 = 104	
13 X 9 = 117	
13 X 10 = 130	
13 X 11 = 143	
13 X 12 = 156	

Date: 28th July,2021 **Day: Wednesday**

Topic: Single Exponent

Objectives: Enable to find single exponent

Exercise 4.4

1. Express the following as single exponents.

i- $(2^3)^5$ **ii- $(10^2)^2$** **iii- $[(-3)^4]^5$**

Parent's Sign:_____

iv- $(p^2)^3$ **v-** $[(-m)^7]^4$

2. Change the following negative exponents into positive exponents.

i- $(12)^{-3}$ **ii-** $(-a)^{-2}$

iii- $[\frac{2}{3}]^{-4}$ **iv-** $[\frac{x}{y}]^{-b}$

3. Evaluate the following expressions.

i- $(1^2)^3 \times (2^3)^2$ **ii-** $[(-3)^7]^0 \times (-3)^2]^2$

Parent's Sign:_____

iii- $[(\frac{-3}{4})^0]^3 \times [(\frac{-3}{4})^2]^2$ **iv-** $\frac{2^3}{2^6 \div 2^3}$

Learn and write table of 14

14 X 1 = 14	
14 X 2 = 28	
14 X 3 = 42	
14 X 4 = 56	
14 X 5 = 70	
14 X 6 = 84	
14 X 7 = 98	
14 X 8 = 112	
14 X 9 = 126	

Parent's Sign:_____

14 X 10 = 140	
14 X 11 = 154	
14 X 12 = 168	

Date: 29th July,2021 **Day: Thursday**

Topic: Review Exercise

Objectives: Enable to solve review exercise

Review Exercise

1. Tick (✓) the correct answer.

i- '3rd power of 5' can be written as :

(a) 3^5 (b) 5^3 (c) 3 x 5 (d) 5 ÷ 3

ii- $(3^0 + 2^0) \div 7^0 =$

(a) $\frac{7}{5}$ (b) $\frac{1}{2}$ (c) $\frac{5}{7}$ (d) 2

iii- The reciprocal of $\left(\frac{\mathrm{p}}{\mathrm{q}}\right)^{-\mathrm{m}}$

(a) $\left(\frac{\mathrm{p}}{\mathrm{q}}\right)^{\mathrm{m}}$ (b) $\left(\frac{\mathrm{q}}{\mathrm{p}}\right)^{\mathrm{m}}$ (c) $\left(\frac{\mathrm{q}}{\mathrm{p}}\right)^{\frac{1}{m}}$ (d) $\left(\frac{1}{\mathrm{pq}}\right)^{\mathrm{m}}$

iv- $(-a)^n$ is negative, if n is :

(a) prime (b) even (c) composite (d) odd

iv- $a^m \div a^n$=?

(a) $(a)^{m+n}$ (b) $(a)^{mn}$ (c) $(a)^{m-n}$ (d) $(a)^{\frac{m}{n}}$

Parent's Sign:_____

2. Fill in the blanks.

(i) 5×5×5×5 can be written in exponential form as _____.

(ii) a^n x b^n = _____ .

(iii) $a^n \div b^n$ = _____.

(iv) Any non-zero rational number with _____ exponent equals to 1.

(v) $(-a)^n$ is positive, if 'n' is an _____ integer.

(vi) _____ is read as 'nth power of a'.

Learn and write table of 15

15 X 1 = 15	
15 X 2 = 30	
15 X 3 = 45	
15 X 4 = 60	
15 X 5 = 75	
15 X 6 = 90	
15 X 7 = 105	
15 X 8 = 120	
15 X 9 = 135	

Parent's Sign:_____

15 X 10 = 150	
15 X 11 = 165	
15 X 12 = 180	

Date: 30th July,2021 **Day: Friday**

Topic: Square

Objectives: Enable to find squares of numbers

Unit 5
Square Root of Positive Numbers
Exercise 5.1

1. Find the squares of the following numbers.

i- 6 **ii- 5** **iii- 10** **iv- 7**

v- 13 **vi- 8**

2. Test whether the following numbers are perfect squares or not.

i- 59 **ii- 625**

Parent's Sign:_____

iii- 225 **iv- 425**

4. Find the squares of proper fractions.Also compare them with itself.

i- $\frac{3}{4}$ **ii-** $\frac{5}{6}$ **iii-** $\frac{4}{11}$

5. Find the squares of decimals and compare them with itself.

(i) 0.4 **(ii) 0.6**

Learn and write table of 16

16 X 1 = 16	
16 X 2 = 32	

Parent's Sign:_____

16 X 3 = 48	
16 X 4 = 64	
16 X 5 = 80	
16 X 6 = 96	
16 X 7 = 112	
16 X 8 = 128	
16 X 9 = 144	
16 X 10 = 160	
16 X 11 = 176	
16 X 12 = 192	

Date: 31st July,2021 **Day: Saturday**

Topic: Square roots

Objectives: Enable to find square roots of numbers

Exercise 5.2

1. Find the square roots of the following numbers.

(i) 4 **(ii) 36**

Parent's Sign:_____

(iii) 81 **(iv) a^2**

(v) 100 **(ii) y^2**

2.Find the square roots of the following numbers by prime factorization.

(i) 256 **(ii) 729**

(iii) 10000 **(iv) 1225**

Parent's Sign:_____

3.Find the square roots of the following fractions.

(i) 2.25 **(ii)** $\frac{144}{196}$

(iii) $\frac{784}{441}$ **(iv) 59.29**

Parent's Sign:_____

Learn and write table of 17

17 X 1 = 17	
17 X 2 = 34	
17 X 3 = 51	
17 X 4 = 68	
17 X 5 = 85	
17 X 6 = 102	
17 X 7 = 119	
17 X 8 = 136	
17 X 9 = 153	
17 X 10 = 170	
17 X 11 = 187	
17 X 12 = 204	

Parent's Sign:_____