AICU (ACADEMIC INTENSIVE CARE UNIT)

SHAHEEN

MATHS WORKSHEET: - PERIOD-1

NUMBER SYSTEM

I. Answer the Following Questions

1. What is maths all about?

Ans: _____

2. What is a number?

Ans: _____

3. How can we use numbers?

Ans: Numbers can be used as _____

_____

4. What are Numerals and its types?

Ans: A numeral is a _____

_____

5. Write Number Names from 1 to 20?

Ans: One, _____

_____

_____

6. What are Tens Numbers?

Ans: Twenty, _____

_____

7. Write Roman Numerals from 1 to 20?

Ans: 1 I

2 II

II. Fill in the Given Blanks

1. Maths is short for _____
2. We use digits 0,1,2,3,4,5,6,7,8,9 to make our_____
3. 9999 is a _____ Digit Number.
4. _____ are the Alphabetical form of Numbers.
5. 100000 in International System called as _____
6. In Roman Number System 1000 is represented as _____
7. Ascending Order is also Called as _____
8. 44,28,55,65,99,24,27 arrange in Descending Order _____

III . Multiple Choice Questions

1. 123, 525, 685 ,562, 852 can be arrange in **descending order** as [a]
   (a) 852,685,562, 525,123 (b) 525,685,562,852,123
   (c) 562,123,852,685,525 (d) 123,525,562,685,852
2. 20 is **less than** 24 is written as [ ]
   (a) 20<24 (c) 24>20
   (b) 20=24 (d) 20≠24
3. 15 is **greater than** 12 is written as [ ]
   (a) 15<12 (c) 12>15
   (b) 15>12 (d) 15≠12
4. 123, 525, 685 ,562, 852 can be arrange in **Ascending order** as [ ]
   (a) 525,685,562,123,852 (c) 525,685,562,852,123
   (b) 562,123,852,685,525 (d) 123,525,562,685,852
5. In Roman Numerals **60** is Written as [ ]
   (a) LX (c) XL
   (b) IXL (d) XIL
6. The biggest **two digit** number is [ ]
   (a) 2 (c) 01
   (b) 10 (d) 99

IV.Match the following

1. Numbers tell you	(a) Six
2. One Crore equals	(b) How many
3. Figure Numeral is	(c) Number code
4. Word Numeral is	(d) Ten Millions
5. Barcode is	(e) 6

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MATHS WORKSHEET: - PERIOD-2

NUMBER SYSTEM

I. Answer the Following Questions

1. What are Cardinal Numbers?

Ans: One,Two_____

2. What are Ordinal Numbers?

Ans: 1st,2nd_____

3. How many Types of Numbers are there?

Ans: _Counting Numbers,_____

_____

4. What is Even Number? Give an Example?

Ans: _____

_____

5. What is Odd Number? Give an Example?

Ans: _____

_____

6. What is the place value of 3 in Indian and International Place Value System in the below table?

Indian Place Value System								
CRORES		LAKHS		THOUSANDS		ONES		
TC	C	TL	L	T-TH	TH	H	T	O
		2	3	1	9	6	1	7

International Place Value Chart								
MILLIONS			THOUSANDS			ONES		
HM	TM	M	HTh	TTh	Th	H	T	O
		2	3	1	9	6	1	7

II. Fill in the Given Blanks

1. Smallest Six digit Number is _____
2. Write 11 in Cardinal Form _____
3. Write Fourth in Ordinal Form _____.
4. Whole Numbers always start with_____
5. Indian system of Numeration is also called as _____.
6. Unit Place of number 2564 is _____
7. The number in the standard form is written by _____
8. Odd Number always gives reminder _____

III . Multiple Choice Questions

7. The **Biggest single Digit** number is [a]

   (a) 9 (c) 1

   (b) 0 (d) 19

8. **√2** is an **example** of what type of number [ ]

   (a) Whole Number (c) Rational Number

   (b) Integers (d) Irrational number

9. **Two Crores, Fifty Six Lakhs,Twenty five thousand, Two Hundred and Sixty three is** [ ]

   (a) 25625263 (c) 26525263

   (b) 25625236 (d) 52625263

10. **Number Name** of 1105 is [ ]

    (a) One One Zero Five (c) Eleven Zero Five

    (b) One Thousand One Hundred and five (d) Eleven Thousand and Five

11. **Commas** separate the numbers into **groups** known as [ ]

    (a) Number System (c) System

    (b) Digits (d) Periods

12. The **Indian Place Value Chart** has _____ Periods [ ]

    (a) 2 (c) 03

    (b) 4 (d) 01

IV.True or False

1. Basically we Indian follows the international number system [ ]
2. 3 is an Even Number [ ]
3. 1000 is the biggest 4 digit Number [ ]
4. Zero is not a part of integers [ ]
5. 2 is called even prime number [ ]

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MATHS WORKSHEET: - PERIOD-3

ADDITION

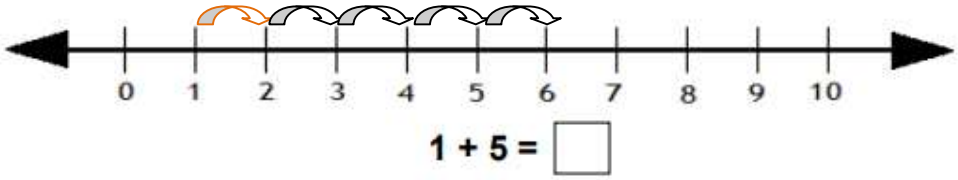
I. Answer the Following Questions

1. What is Addition?

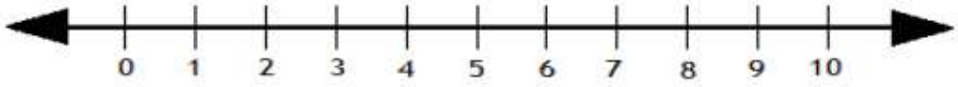
Ans: The process of _____

_____

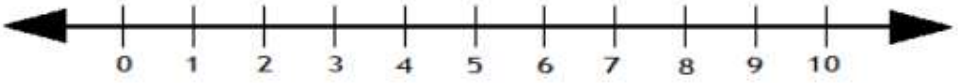
2. Solve the following by drawing hops on the number line



1 + 5 = ☐



2 + 8 = ☐



1 + 4 = ☐

3. Add the Following Numbers

(a)	(b)	(c)	(d)
2465	58964	`689235	6425
+ 9545	+ 65486	+ 589756	+ 2234
_____	_____	_____	_____
_____	_____	_____	_____

3. What is Commutative Property of Addition? Give an Example

Ans:

4. What is Associative Property of Addition? Give an Example?

Ans:

5. What is Identity Property of Addition? Give an Example?

Ans:

II.Word Problems in Addition

1. A School Library has 3850 books in kannnada, 4562 books in English, and 5485 books in other languages. Total how many books are there in Library?

Sol :

2. Santosh deposited 12456 rupees in bank on Tuesday and 6589 rupees on Wednesday. What is the amount of money deposited by him in bank in these 2 days?

Sol:

3. In an Examination 75236 students passed and 14875 students failed.Find how many students appreared for the examination?

Sol:

4. There are 4375 male and 5689 female high school teachers in a city. Find Total number of teachers in the city?

Sol:

5. A man plucked 4582 Apples from one tree, 5231 Apples from Second tree and 2313 Apples from third tree. Find the total number of Apples plucked from the trees?

Sol:

III. Estimating sum by rounding

1. **48+33 = 48** is rounded to **50 and 33** is rounded to **30 ,therefore**

   50+30=80

   The estimated sum of 48+33= **80**

2. **27+88**

3. **458+698**

4. **2778+5657**

IV . Multiple Choice Questions

1. The **A+0 is** [ ]
   (a) 0 (c) A
   (b) 0+A (d) A-0

2. Commutative property satisfies **a+b** = [ ]
   (a) a2+b2 (c) b+a
   (b) a-b (d) b-a

3. **Numbers that are added are called** [ ]
   (a) Dividends (c) Addends
   (b) Extra (d) Quotient

4. **We use _____numbers** for estimation to nearest tens, Hundreds [ ]
   (a) circled (c) square
   (b) rounded (d) rectangular

5. **2+6 = 6+2 satisfies which property** [ ]
   (a) distributive (c) Associative
   (b) commutative (d) closure

6. **Addend+ Addend** = [ ]
   (a) growth (c) difference
   (b) sum (d) result

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MATHS WORKSHEET: - PERIOD-4

SUBTRACTION

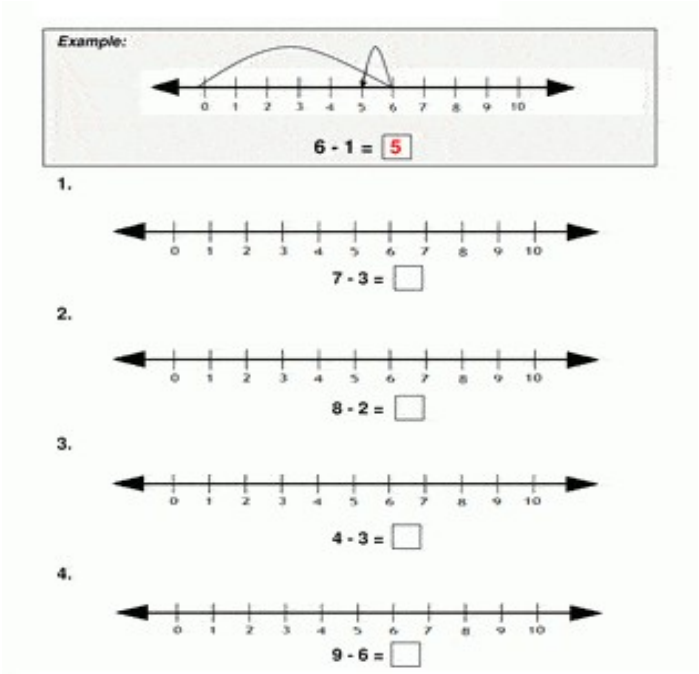
I. Answer the Following Questions

1. What is Subtraction?

Ans: The process of _____

_____

2. Solve the following by drawing hops on the number line



3. Subtract the Following Numbers

(a)	(b)	(c)	(d)
9545	65486	`689235	6425
- 2465	- 58964	- 589756	- 2234
_____	_____	_____	_____
_____	_____	_____	_____

3. What are the properties of subtraction?

Ans:

II.Word Problems in Addition

1. Faheem has Rs 7856 in his bank; he withdraws Rs 2340 on Monday and Rs 3250 on Tuesday. What amount is still left in his bank account?

Sol:

2. Satish earns Rs 8800 monthly as his salary, he saves Rs 1500 monthly.What is her monthly expenditure ?

Sol:

3. By how much is smallest 5- digit number is greater than largest 4-digit number?

Sol:

4. Rajani bought a Pressure cooker for Rs 4520. She gave the shopkeeper Rs 5000? What amount will be returned by the shopkeeper?

Sol:

5. An animal care society tested 3560 pet animals. 1270were infected by diseases. Find the number of healthy pet animals that participated in the medical tests?

Sol:

III. Estimating the difference by rounding

1. **68+37 = 68** is rounded to **70 and 37** is rounded to **40 ,therefore**

   70-40=30

   The estimated difference of 70-40= 30

2. **88-27**

3. **698-459**

4. **5657-4250**

IV . Multiple Choice Questions

1. The **A-0 is** [ ]
   (a) 0 (c) A
   (b) 0-A (d) A+0

2. **Minuend-Subtrahend**= [ ]
   (a) Total (c) Difference
   (b) Subtract (d) between

3. **Is the sign of Subtraction** [ ]
   (a) - (c) +
   (b) x (d) *

4. **We use _____numbers** for estimation to nearest tens, Hundreds [ ]
   (a) circled (c) square
   (b) rounded (d) rectangular

5. **0-2 = 2-0** [ ]
   (a) satisfies (c) unsatisfied
   (b) Equals (d) closure

SHAHEEN

MULTIPLICATION

I. Answer the Following Questions

1. What is Multiplication?

Ans: The Multiplication of _____

_____

2. Define the following Terms with examples.

(a) **Factors:**

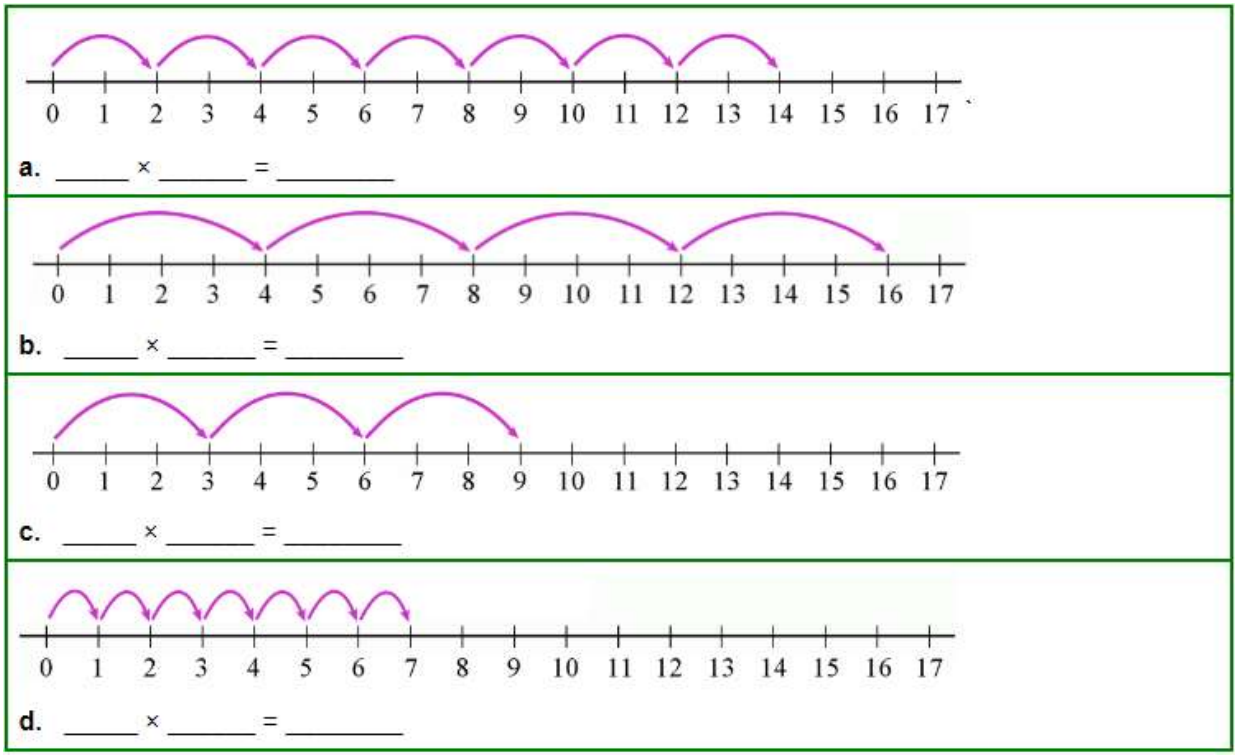
(b) Product:

(c) Multiplicand:

(d) Multiplier:

(e) **Skip Counting** :

3. Write the multiplication sentence that the jumps on the number line illustrate



2. Solve the following Problems

(a) 123 X 4 = _____

(b) 52 x 49 = _____

(C) 564 x 59 = _____

(d) 986 x 456 = _____

(e) 4568 x 564 = _____

(f) 10000 x 99999 = _____

II.Word Problems in Multiplication

1. The cost of a flat is Rs 8,20,000, if there are 30 similar flats in a building how much money will be collected for selling the flats ?

Sol:

2. A game rewards a player 250 points every time the player finds a treasure chest. How many points will the player get if he finds 20 Treasure chests?

Sol:

3. Every month 23 matches are played in local stadium. How many matches will be played in a year?

Sol:

4. On her Birthday, Salma distributes sweets among 35 sections of her school and each section has 32 students. How many sweets does Salma distribute in all?

Sol:

5. In a Shoe rack there are 25 shoes in a row and there are 32 rows in the shoe-rack. How many shoes are there in total?

Sol:

III . Multiple Choice Questions

1. The **0x1 is** [ ]

(a) 0 (c) 1

(b) 11 (d) 00

2. **The Multiplication of number may be thought of as a repeated** **[ ]**

(a) Sum (c) Difference

(b) Subtraction (d) Addition

3. **Is the sign of Multiplication** [ ]

(a) - (c) +

(b) x (d) *

4. **Factors are numbers that are being _____** [ ]

(a) circled (c) square

(b) Multiplied (d) Tables

5. **Skip counting is a method of counting _____** **[ ]**

(a) Satisfies (c) forward

(b) equals (d) backward

MULTIPLICATION

I. Answer the Following Questions

1. What are the two special cases when multiplying?

Ans: When multiplying with _ _____

_____

2. Define the following Properties of Multiplication? Write with examples?

(a) **Commutative Property:**

(b) **Associative Property:**

(c) **Identity Property:**

(d) **Zero Property :**

3. Solve 35 x 32 using Grid Method Multiplication?

4. Draw Smart multiplication table from 1 to 15?

5. Write the Short-cut methods of multiplying with 11 and 90's?

III . Multiple Choice Questions

1. The **0x1 is** [ ]

(a) 0 (c) 1

(b) 11 (d) 00

6. **The Multiplication of number may be thought of as a repeated** **[ ]**

(a) Sum (c) Difference

(b) Subtraction (d) Addition

7. **Is the sign of Multiplication** [ ]

(a) - (c) +

(b) x (d) *

8. **If we multiply 10 by any whole number then we write one zero at the end of ____** **[ ]**

(a) Multiplicand (c) factor

(b) Multiplied (d) Multiples

9. **We use rounded number for _____ to its nearest tens, hundreds** **[ ]**

(a) Estimation (c) Zero

(b) Calculation (d) Simplification

DIVISION

I. Answer the Following Questions

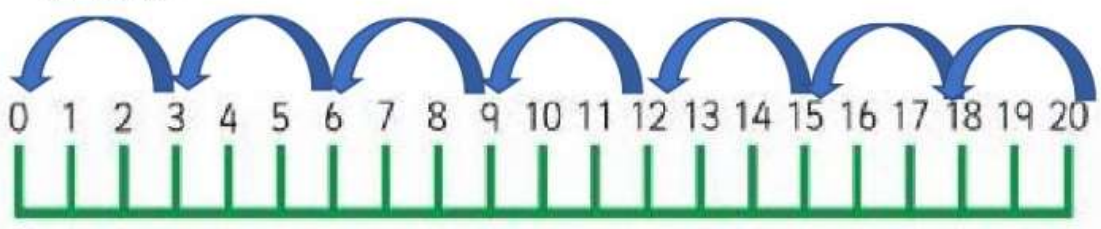
1. What is Division?

Ans: _____

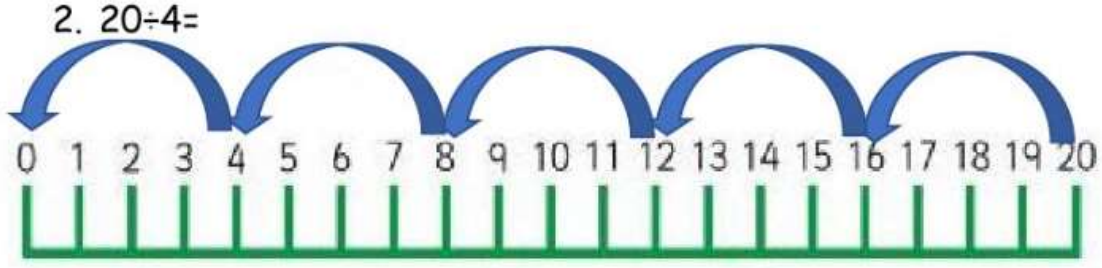
_____

2. Complete the division by counting the necessary hops on the number line

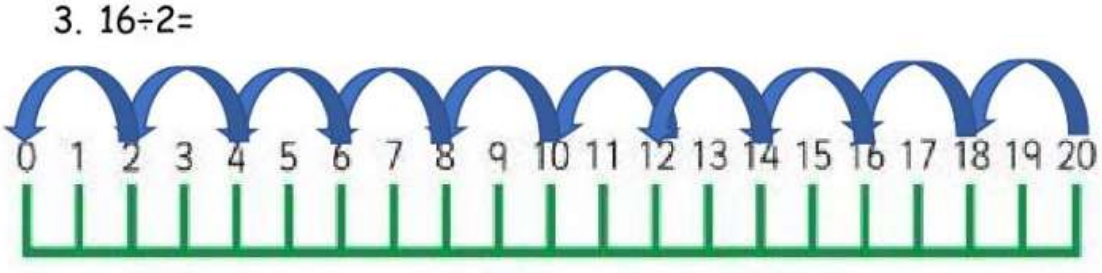
1. 15÷3=



2. 20÷4=



3. 16÷2=



3. Give an example of division as repeated subtraction?

Sol:

4. Give an example of Division of Zero and by Zero?

Sol:

5. Given an example of Division by one and the number itself?

Sol:

6. Solve the Following

(a) 22÷ 2 (b) 225÷ 25 (c) 625 ÷ 125

III . Multiple Choice Questions

1. The **0÷1 is** [ ]

(a) 0 (c) 1

(b) 11 (d) 00

2. Dividend + Divisor = **[ ]**

(a) Sum (c) Remainder

(b) Subtraction (d) Quotient

3. Is the sign of Division [ ]

(a) - (c) ÷

(b) x (d) *

4. 16÷ 0 ____ **[ ]**

(a) Defined (c) Not Defined

(b) Not-Possible (d) Unsatisfied

5. Dividing by itself equals_____ **[ ]**

(a) Zero (c) Not Defined

(b) One (d) Infinity

DIVISION

I. Answer the Following Questions

1. Is Commutative and Associative Property work for Division? To prove give an example?

Sol:

2. Give an example of Division by 10, 100, 1000 and Zero?

Sol:

3. Divide and Verify 77÷4

Sol:

4 Give an example of "Checking Division Verification using Multiplication Table"?
Sol:

5 Estimate 72 ÷ 9

Sol:

II.Word Problems in Addition

1. The Annual Income of Shahid is Rs 42,00,00. What is his monthly income if he earns an equal amount every month?

Sol:

2. 860 students were to be seated in 20 rows of an auditorium. If equal number of students sat in each row, how many students were there in each row?

Sol:

3. Plants are sold in trays of 20. If David wants 240 plants ,how many trays does He needs to buy?

Sol:

4. If 9975 kg of wheat is packed in 95 bags, how much wheat will each bag contain?

Sol:

5. Neena needs 5 lemons to make a glass of orange juice. If Nancy has 250 oranges, how many glasses of orange juice can she make?

Sol:

6. A car company manufactured 1674 cars in 31 days of January. If the company manufactured equal number of cars each day, then how many cars were made each day?

Sol:

III . Multiple Choice Questions

1. The **0x1 is** [ ]

(a) 0 (c) 1

(b) 11 (d) 00

10. **The Multiplication of number may be thought of as a repeated** **[ ]**

(c) Sum (c) Difference

(d) Subtraction (d) Addition

11. **Is the sign of Multiplication** [ ]

(a) - (c) +

(b) x (d) *

12. **If we multiply 10 by any whole number then we write one zero at the end of ____** **[ ]**

(c) Multiplicand (c) factor

(d) Multiplied (d) Multiples

13. **We use rounded number for _____ to its nearest tens, hundreds** **[ ]**

(a) Estimation (c) Zero

(b) Calculation (d) Simplification

FACTORS

I. Answer the Following Questions

1. What is a factor? Give an example?

Sol:

2. What are properties of factors?

Sol:

3. What is Factorization? Give an Example?

Sol:

4 What is Factor Tree? Give an Example?
Sol:

5 What is Common Factor? Give an Example?

Sol:

6. What is Prime Number? Give examples?

Sol :

7. What is Composite Number? Give Examples?

Sol :

8. What are Co-Prime Numbers? Give Example?

Sol:

9. Find Prime Factorization of 72 using Factor Tree Method?

Sol :

10. Find Prime Factorization of 36 using Ladder Method?

Sol:

11. What is HCF? Give Example?

Sol:

12. Find HCF of 36 and 48 using Prime Factorization method?

Sol:

13. Find HCF of 45 and 60 using short Division method?

Sol:

III . Multiple Choice Questions

1. Every Number is a factor of _____ [ ]

(a) Oneself (c) Itself

(b) Himself (d) herself

2. Every _____of that number is an exact divisor of Number**.** **[ ]**

(a) multiple (c) Factor

(b) Product (d) Table

3. ___ is a factor of Every Number [ ]

(a) 0 (c) 1

(b) 10 (d) 100

4. A number is the largest _____ of itself **[ ]**

(a) Multiplicand (c) factor

(b) Multiplied (d) Multiples

(c) **Number of factors of a number is _____** **[ ]**

(a) Finite (c) Zero

(b) Infinite (d) Definite

(d) _____ **is a diagram used to determine the Prime factors of a natural number greater than one**.[ ]

(a) Multiple tree (c) Table Tree

(b) Factor Tree (d) Father Tree

(e) The factors of 12 are _____ [ ]

(a) 1 & 12 (c) 12 & 1

(b) 1,2,3,4,6 & 12 (d) 2,3,4,6 & 12

MULTIPLES

I. Answer the Following Questions

1. What is a Multiple? Give an example?

Sol:

2. What is Common Multiple? Show Example

Sol:

3. What is Factorization? Give an Example?

Sol:

4 What is Factor Tree? Give an Example?

Sol:

5 What is Common Factor? Give an Example?

Sol:

6.What is Prime Number? Give examples?

Sol :

7. What is Composite Number? Give Examples?

Sol :

8. What are Co-Prime Numbers? Give Example?

Sol:

9. Find Prime Factorization of 72 using Factor Tree Method?

Sol :

10. Find Prime Factorization of 36 using Ladder Method?

Sol:

11. What is HCF? Give Example?

Sol:

12. Find HCF of 36 and 48 using Prime Factorization method?

Sol:

13. Find HCF of 45 and 60 using short Division method?

Sol:

III . Multiple Choice Questions

1. Every Number is a factor of _____ [ ]

(a) Oneself (c) Itself

(b) Himself (d) herself

2. Every _____of that number is an exact divisor of Number**.** **[ ]**

(c) multiple (c) Factor

(d) Product (d) Table

3. ___ is a factor of Every Number [ ]

(a) 0 (c) 1

(b) 10 (d) 100

4. A number is the largest _____ of itself **[ ]**

(f) Multiplicand (c) factor

(g) Multiplied (d) Multiples

5. Number of factors of a number is _____ **[ ]**

(a) Finite (c) Zero

(b) Infinite (d) Definite

6. _____ **is a diagram used to determine the Prime factors of a natural number greater than one**.[ ]

(a) Multiple tree (c) Table Tree

(b) Factor Tree (d) Father Tree

7. The factors of 12 are _____ [ ]

(c) 1 & 12 (c) 12 & 1

(d) 1,2,3,4,6 & 12 (d) 2,3,4,6 & 12

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SHAHEEN

MATHS WORKSHEET: - PERIOD-11

INTEGERS WITH OPERATIONS

I. Answer the Following Questions

1. What is Integer? And it's types?

Sol:

2. How do you represent Integers on Number line?

Sol:

3. What is the Absolute Value of Integers?

Sol:

4 Solve the Following

(a) 2+ (-6)

(b) 25 + (-32)

(c) 482 + (-521)

(d) 7- (-42)

(e) 45- (-35)

(f) 965 – (-1000)

(g) -10 x 25

(h) -15 x 41 x -20

(i) – 45 ÷ 3

(J) -26 ÷ -13

(k) 20 ÷ 5 + 4 x -2 + 4 (Solve by BODMAS Rule)

5. Write the Properties of Integers with examples?

Word Problems Integers

1. You take 6 steps forward and 8 steps backward. How many steps have you taken?

Sol:

2. A computer Stock lost 2 points each hour for 6 hours. Find the total points the stock fell?

Sol:

3. A deep-sea diver descends below the surface of water at a rate of 50 feet each minute. What is the depth of the diver after 10 minutes?

Sol:

4. Suppose the temperature outside is dropping 3 degrees each hour. How much will the temperature drop in 7 hours?

Sol:

5. An airplane takes off and then climbs 2500 feet. After 20 minutes, the airplane descends 150 feet. What is the airplane's current height?

Sol:

III . Multiple Choice Questions

1. Full form of **BODMAS** is _____ [ ]

(a) Bound Open Division Maths and Statistics (b) Brackets Open Division Multiplication Addition Subtraction (c) None (d) a and b

2. Additive identity is _____. **[ ]**

(a) one (c) Zero

(b) Inverse (d) Table

3. Multiplicative Identity is _____ [ ]

(a) Zero (c) One

(b) Ten (d) 100

4. Absolute Values are never _____ **[ ]**

(a) Positive (c) Negative

(b) Zero (d) Multiplies

5. An Integer is Positive if it is greater than _____ **[ ]**

(a) One (c) Zero

(b) Two (d) Six

6. An integer is negative if it is less than_____. [ ]

(a) One (c) Twelve

(b) Zero (d) Seven

7. |o| is equal to _____ [ ]

(a) 0 (c) 1

(b) 2 (d) 3

I. Answer the Following Questions

1. Define Fractios? What are its Parts?

Sol:

2. Show one-fourth, one-half, one-third of fractions? Using diagrams?

Sol:

3. Show Fraction on a number line?

Sol:

4 Show the Ways of representing fractions?

Sol:

5. What is equivalent fraction? Give an Example?

Sol:

6. Reduce the following fractions to its lowest terms :

(a) 24/16 (b) 125/100

7. What are like and unlike functions? Give an Example

8. Given an Example of Proper, Improper, and Mixed Functions? With Example

Word Problems Integers

9. You take 6 steps forward and 8 steps backward. How many steps have you taken?

Sol:

10. A computer Stock lost 2 points each hour for 6 hours. Find the total points the stock fell?

Sol:

11. A deep-sea diver descends below the surface of water at a rate of 50 feet each minute. What is the depth of the diver after 10 minutes?

Sol:

12. Suppose the temperature outside is dropping 3 degrees each hour. How much will the temperature drop in 7 hours?

Sol:

13. An airplane takes off and then climbs 2500 feet. After 20 minutes, the airplane descends 150 feet. What is the airplane's current height?

Sol:

III . Multiple Choice Questions

1. Full form of **BODMAS** is _____ [ ]

(a) Bound Open Division Maths and Statistics (b) Brackets Open Division Multiplication Addition Subtraction (c) None (d) a and b

8. Additive identity is _____. **[ ]**

(a) one (c) Zero

(b) Inverse (d) Table

9. Multiplicative Identity is _____ [ ]

(a) Zero (c) One

(b) Ten (d) 100

10. Absolute Values are never _____ **[ ]**

(a) Positive (c) Negative

(b) Zero (d) Multiplies

11. An Integer is Positive if it is greater than _____ **[ ]**

(a) One (c) Zero

(b) Two (d) Six

12. An integer is negative if it is less than_____. [ ]

(a) One (c) Twelve

(b) Zero (d) Seven

13. |o| is equal to _____ [ ]

(a) 0 (c) 1

(b) 2 (d) 3

AICU (ACADEMIC INTENSIVE CARE UNIT)

SHAHEEN

MATHS WORKSHEET: - PERIOD-13

FRACTIONS

I. Answer the Following Questions

1. Convert the following Improper fractions to Mixed Fractions

(a) 5/2 (b) 8/3 (c) 13/4

2. Converting the following Mixed Fraction to Improper fractions?

(a) $3\frac{3}{5}$ (b) $5\frac{4}{5}$ (c) $6\frac{7}{8}$

3. Compare the following fraction (<, >, =)?

(a) 5/2 ☐ 6/9 (b) 8/3 ☐ 5/2 (c) 13/4 ☐ 6/5

4 Give examples of Fractions using in daily life?

Sol:

5. Solve the following fractions

(a) 5/3 + 9/3

(b) 5/4 + 6/9

(c) 8/4 - 2/3

(d) 5/3 – 2/3

(e) 8/2 - 3/5

(f) 4/5 x 6/5

(g.) 25/100 x 5/10

(h) 50 /10 ÷ 25/ 100

(i) 45/15 ÷ 225/ 15

(j) 115/5 ÷ 25/ 75

6. What are the properties of Fraction?

7. Simplify 1/3 + [1/2 – {1/4 + (1/3 -1/5)}] using Bodmas?

Sol:

WORD PROBLEMS

1. There are 24 hours in a day and scientists tell us that we should sleep for 3/8 of the day. How much time should we spend on sleeping?

Sol:

2. Mr. Sam is 170 cm tall and his brother Tom is 7/8 as tall as him. How tall is Tom?

Sol:

3. In a school 4/6 of the students are male. Of the male ½ are handicapped. What fractions of the male students are unhandicapped?

Sol:

4. There was 4/5 of a pie left in the fridge .Sarah ate 1/6 of the leftover pie. How much of the pie did she have?

Sol:

5. Pam baked some cupcakes for her friends. She baked 24 cupcakes. Each cupcake is 1/10 pound. What is the total weight of cupcakes?

Sol:

6. 40 students joined the soccer club. 5/8 of the students were boys. How many girls joined the soccer club?

Sol:

III . Multiple Choice Questions

1. **The identity element for fractional addition is_____** [ ]

(a) Zero (b) One (c) None (d) a and b

2. The following properties hold true for fraction Addition and Subtraction____ **[ ]**

(a) Commutative and Associative (c) Zero

(b) Inverse (d) Distributive

3. Multiplicative Inverse of 1/2 is _____ [ ]

(a) Zero (c) One

(b) 2/1 (d) 2

4. Addition and Subtraction of Fractions is possible with_____ **[ ]**

(a) Like fraction (c) Unlike Fraction

(b) Both A and B (d) None

SHAHEEN

DECIMALS

I. Answer the Following Questions

1. Define Decimal Number? What are its Parts?

Sol:

2. Show one-fourth, one-half, one-third of Decimal? Using Diagrams?

Sol:

3. Show Decimal number on a number line?

Sol:

4. Reduce the following Fractions to its lowest terms:

(a) 0.02 (b) 0.003 (c) 0.010

5. What are Like and Unlike Decimals? Give an Example.

6. Convert the following Decimals to Fractions?

(a) 0.2 (b) 0.25 (c) 0.0025 (d) 0.250

7. Convert each of these unlike decimals into like decimals:

(a) 0.1, 3.68, 1 (b) 1.11, 12.754, 92.5, 17 (c) 8.39, 9.236, 24.8, 263.07, 3

7. Convert the following fractions into decimals?

(a) 12/15 (b) 1/1000 (c) 5/ 25 (d) 4/ 20

III . Multiple Choice Questions

1. **In Decimal Number the whole part and Decimal part is divided by __** [ ]

(a) Point (b) Decimal point (c) Ten (d) Zero

2. 0.25 is called _____ **[ ]**

(a) Quarter (b) Three Quarter
(c) Half (d) none.

3. 0.24 the place value of 4 is _____ [ ]

(a) Tenth (c) One

(b) Hundredth (d) 1000

4. To convert the fraction to a decimal ,divide the numerator by _____ **[ ]**

(a)Numerator (c) Negative

(b) Denominator (d) Multiplies

5. We write fraction, using decimal number as the numerator and a power of ___ **[ ]**

(a) Ten (c) Zero

(b) Two (d) Six

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SHAHEEN

MATHS WORKSHEET: - PERIOD-15

DECIMALS

I. Answer the Following Questions

1. Order 16, 14.95, 15.62, 13, 13.62 from Least to Greatest?

2. Compare the following Decimals (<, >, =)?

(a) 5.20 ☐ 5.02 (b) 83.1 ☐ 512.33 (c) 11.21 ☐ 21.11

3. Give examples of Decimals using in daily life?

Sol:

4. Solve the following Decimals

(a) 5.23 + 5.455 (b) 0.235 + 0.002 (c) 514.3 – 2122.3

(d) 0.0025 –0.0023 (e) 0.552 -0.3352 (f) 4.25 x 6.35

(g.) 243.15 x 5.00 (h) 0.25 ÷ 0.5 (i) 0.211 ÷ 0.10

(j) 2.22 ÷ 5.23

5. Write the expanded form of the following decimal number using the decimals

(a) 14.231 (b) 0.231 (c) 4.521

6. Write the expanded form of the following decimal number using the fractions

(a) 16.231 (b) 12.231 (c) 45.521

WORD PROBLEMS

1. John bought 9.25m of cloth for Rs 425.50. Find the cost price per metre.

Sol:

2. One kg Basmati rice costs Rs 43.75. Find the cost of 17 kg of rice?

Sol:

3. The product of two numbers is 42.63. If one number is 2.1, find the other?

Sol:

4. Sami weighs 8.6 kg .His older brother is 3 times as heavy. How much does his older brother weigh?

Sol:

5. Ashley found 2 boxes of sugar in the kitchen. The green box is 1.26 kg and the red box is 1.026 kg. Which box contains more sugar?

Sol:

6. A student earns Rs 151.75 per hour for gardening. If she worked 21 hours this month, then how much did she earn?

Sol:

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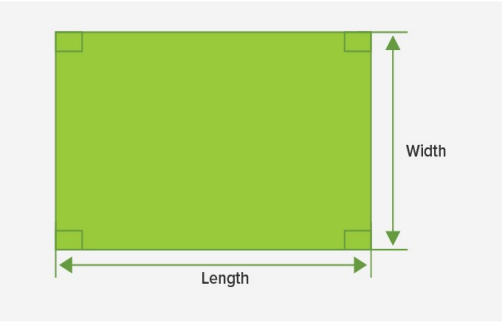
MATHS WORKSHEET: - PERIOD-16

SHAHEEN

SHAPES

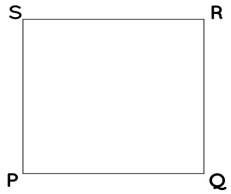
1. **Draw & Define the following Diagrams**

(A) **DRAW**



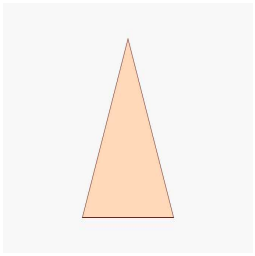
Sol: _____
_____
_____
_____

(B) **DRAW**



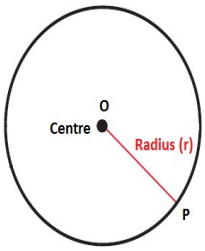
Sol: _____
_____
_____
_____

(C) **DRAW**



Sol: _____
_____
_____
_____

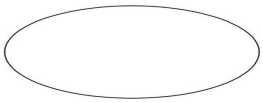
(D) DRAW



Sol: _____
_____
_____
_____

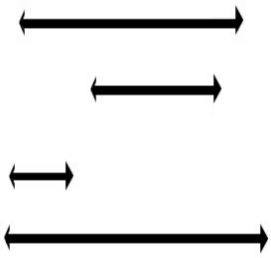
(E) **DRAW**

It is an oval.



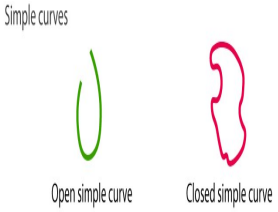
Sol: _____
_____
_____
_____

(F) **DRAW**



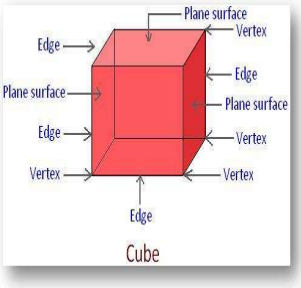
Sol:_____
_____
_____
_____

(G) **DRAW**



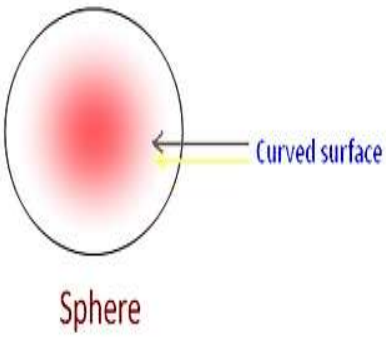
Sol:_____
_____
_____
_____

(H) **DRAW**



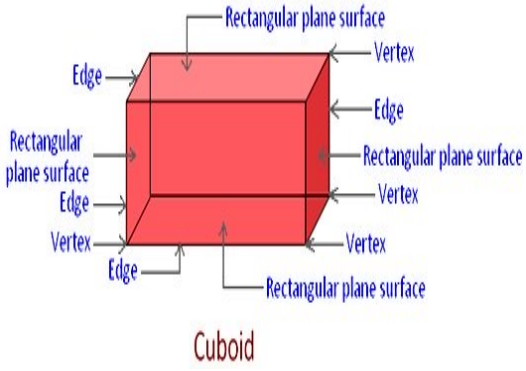
Sol:_____ _____
_____ _____
_____
_____

(I) DRAW



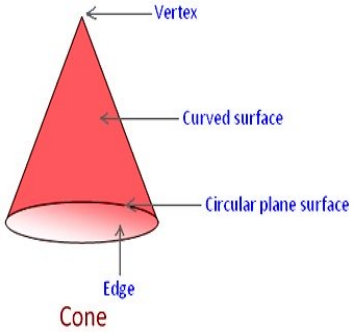
Sol:_____
_____
_____
_____

(J) DRAW



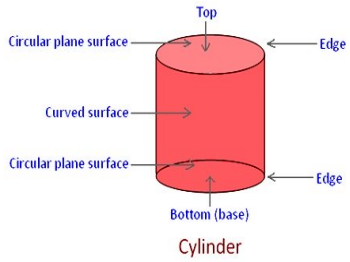
Sol:_____
_____
_____
_____

(K) DRAW



Sol:_____
_____
_____
_____

(H) Draw



Sol:_____
_____
_____
_____

AICU (ACADEMIC INTENSIVE CARE UNIT)

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MATHS WORKSHEET: - PERIOD-17

SHAPES

1. What are Rolling Shapes? Give an Example with drawing?

Sol: _____ DRAW
_____
_____
_____

2. What is Sliding Shapes? Give an Example with drawing?

Sol: _____ DRAW
_____
_____
_____

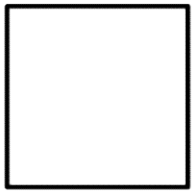
3. Describe Horizontal, Vertical and Slanting Lines? Show with Diagrams?

Sol: _____ DRAW
_____
_____
_____

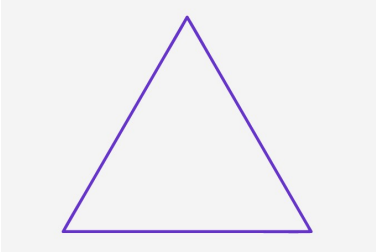
4. Describe feel of Objects with example?

Sol: _____ DRAW
_____
_____
_____

5. Describe the following Plane Shapes (Sides and Corners)?
(A)

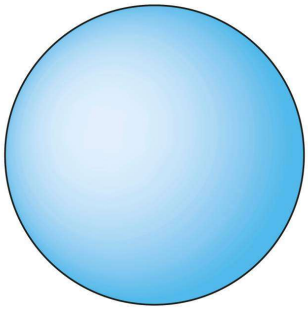


(B)

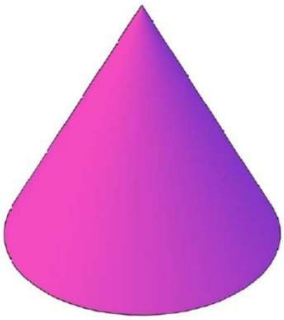


6. Describe and Show (Faces, Edges, Corners, Vertices) of the following SOLID Shapes?

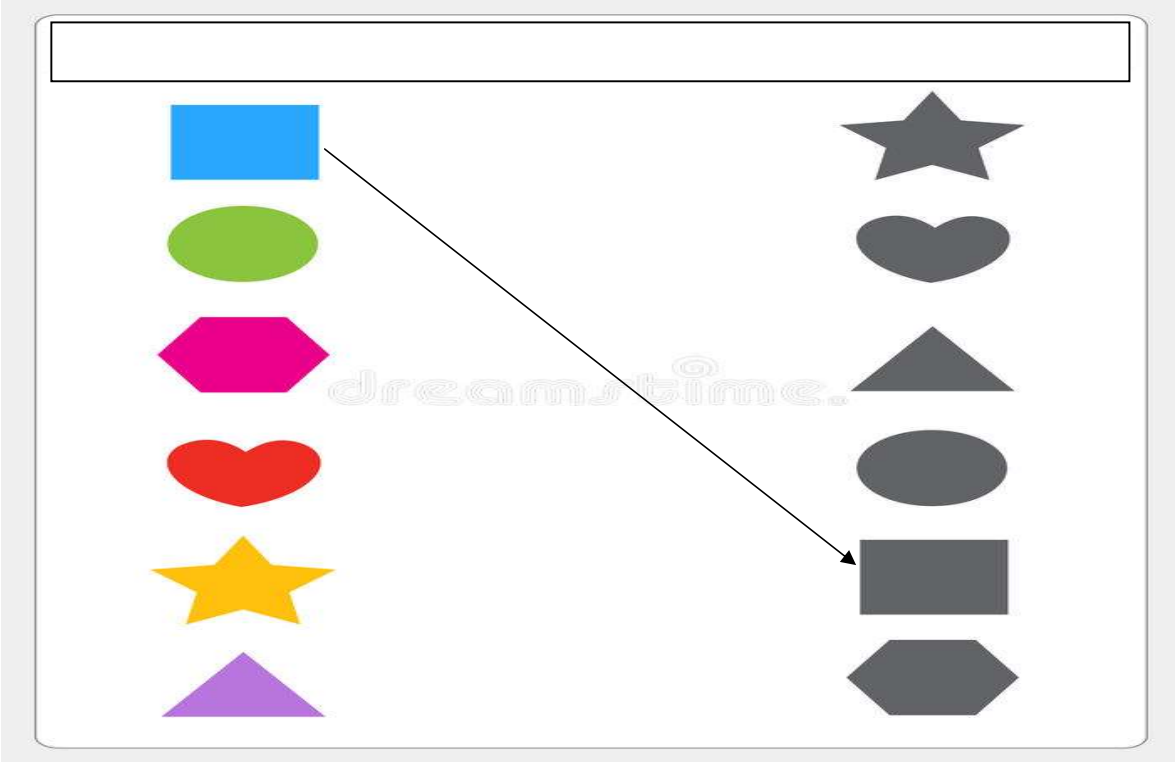
(a) <u>Sphere:</u>



(b) <u>Cone:</u>



7. Draw lines to match each shape to its shadow?



8. What is TANGRAM? Draw its Example?

Sol: _____ **DRAW**

_____

_____

_____

9. What are Polygons? What are its types and draw it?

Sol: _____ **DRAW**

_____

_____

_____

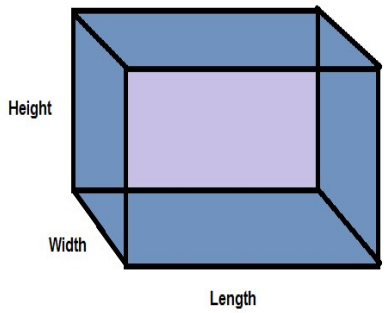
Types of Polygons:

10. What is Net? Draw Nets of following 3D Shapes?

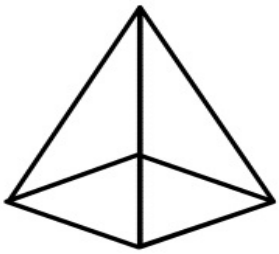
Sol: _____
_____
_____
_____

(a) **Draw Net of Rectangular Prism**

Rectangular Prism

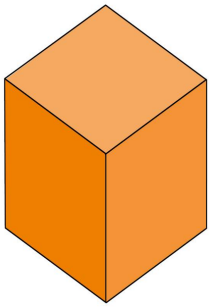


(b) Pyramid **Draw Net of Pyramid**



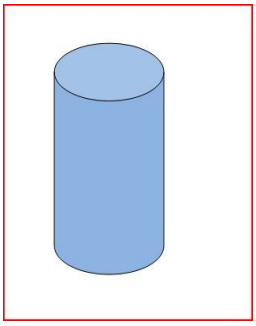
11. **Draw Different Views of the following 3D Shapes**?

(a) Cube :



Top View Side View Front view

(b) Cylinder:



Top View Side View Front view

AICU (ACADEMIC INTENSIVE CARE UNIT)

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MATHS WORKSHEET: - PERIOD-18

MEASUREMENT

I. Answer the Following Questions

1. **Define Measurement? Give an Example?**

Sol: _____

_____

_____

_____

_____

2. What are the Non- Standard Units of Length? Given examples?

Sol: _____

_____

_____

_____

_____

3. What are the Standard Units of Length? Given examples?

Sol: _____

_____

_____

_____

_____

4. Solve the following

(a) Convert 6m to cm **(b) Convert 12 km to m** **(c) Convert 2500 m to km**

5. **Sara used 2m 60cm red ribbon& 5m 28 cm of Blue Ribbon to make a flower. How much Ribbon did she use in all?**

Sol:

6. **One Box is 49 cm 5mm tall; another Box is 36 cm tall. How much long is the first Box with another Box?**

Sol:

7. **A rope is 72cm long. It is cut into 8 pieces to make 8 triangles .What is total length of each piece?**

Sol:

8. **Shivani measured 8m of Fabric to make a window curtains. How much fabric does she need to buy if her house has 7 same size windows?**

Sol:

9. Draw Conversion Chart of Length Measurement?

Sol:

Kilometre	Hectometre	Decametre	Meter	Decimetre	Centimetre	Millimetre

10. Select the unit of length that best represents the measurement of each of the following object?

1)

2km 2mm 10cm

2)

20cm 10mm 2m

3)

5cm 1km 5mm

4)

5m 2mm 5cm

5)

3km 3m 30mm

6)

4cm 4mm 4m

III . Multiple Choice Questions

1. _____ **is the collection of information in numeric form** [ ]
   (a) Measurement (c) Estimation
   (b) Collection (d) Format

2. **To compare Lengths the objects must start at _____Places** [ ]
   (a) Different (c) Same
   (b) Usual (d) Unusual

3. **Which is the example of non-standard units of length** [ ]
   (a) Hand Span (c) Centimetre
   (b) Meter (d) Kilometre

4. **The Meter is base unit of length in the _____ metric system** [ ]
   (a) International (c) National
   (b) Seasonal (d) Metric System

5. **Converting 887 centimetres to meters gives** [ ]
   (a) 8870 m (c) 88.7 m
   (b) 8.87 m (d) 870.0 m

AICU (ACADEMIC INTENSIVE CARE UNIT)

MATHS WORKSHEET: - PERIOD-19

SHAHEEN

MEASUREMENT

1. **What are the standard units of weight? Give an Example?**

Sol:

2. **Sachin purchased 8 kg 200 g of sugar, 10kg 395 g of rice. What is the total weight which Sachin carried?**

Sol:

3. **The total weight of Sania's bag is 55 kg 750 g and Alia's bag is 48 kg 950 g. whose bag is heavier and by how much?**

Sol:

4. **How much heavier are the 9 toffee packets, if one toffee packet weighs 7 kg 200 g?**

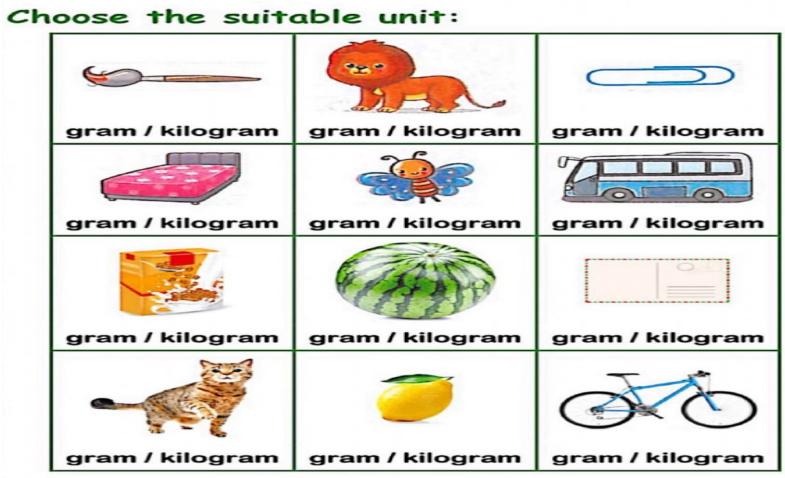
Sol

5. 875 grams of sweets were distributed among 9 children. How much sweet was given to each child?
Sol:

6. Draw Conversion of Weight measurement table?

Milligram
Centigram
Decigram
Gram
Decagram
Hectogram
Kilogram

7. **Solve the following**



III . Multiple Choice Questions

1. **The most common use of measurement for mass are _____** [ ]

(a) Grams & Kilograms (c) Centimetres
(b) litres (d) Meters

2. **1000 gm is approximately _____** [ ]
(a) 1 Kg (c) Same
(b) 1000mg (d) None

3. **25 g is equal to ____** [ ]

(a)0.0025 kg (c) 0025 kg

(b) 0.025 kg (d) 00025kg

4. **To measure the weight of pencil and book we use _____** [ ]
(a) Weight Balance (c) Balance Pan
(b) Balance System (d) Metric System

5. **In Weight Balance two scale pans must have same _____** [ ]
(a) weight (c) Points
(b) height (d) system

I. Answer the Following Questions

1. **Define Standard units of Capacity?**

Sol: _____

2. Convert the following into millilitres?

(a) 600 Litres (b) 780 Litres (c) 840 Litres (d) 870 Litres

2. Convert the following into Litres?

(a) 6.80 ml (b) 7.62 ml (c) 8.90 ml (d) 8.76 ml

3. Akash purchased 11 L 500 ml of Petrol for his bike and38 L 300ml of Petrol for his Car. How much petrol did he buy in all?
Sol:

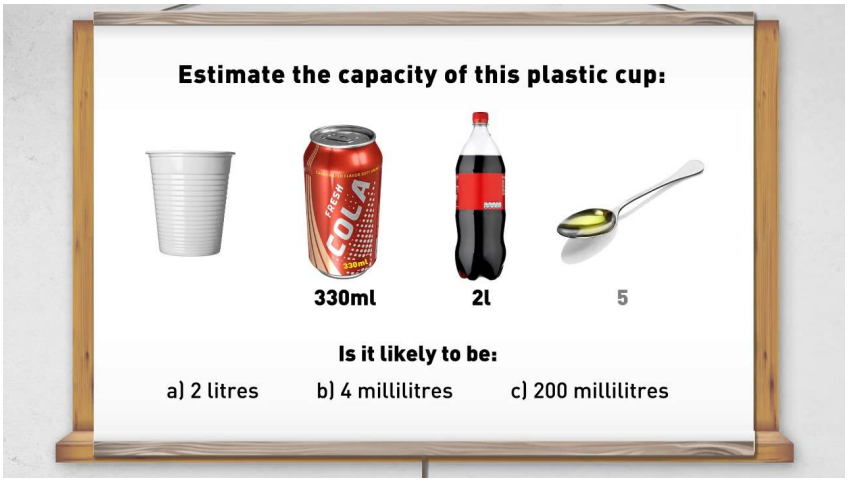
4. The Milk Man Delivered38 liters 250 ml of milk to a Hotel. 16 L and 200 ml of Milk is used to prepare tea. How much milk is left?
Sol:

5. 2L of cooking oil required for making 1 Kg Jalebi? How much cooking Oil is required for making 16 kg Jalebi?
Sol:

6. Draw Conversion Chart of Capacity Measurement?
Sol:

Kilolitre	Hectolitre	Decilitre	Litre	Decilitre	Centilitre	Millilitre

7. Estimate the Capacity of the given cup in diagram



III . Multiple Choice Questions

1. **Infant milk bottle with measurement markings in _____** [ ]
   (a) Millilitre (c) Centimetres
   (b) Litres (d) Meters

2. **We Measure Capacity of water in CUP as _____** [ ]
   (a) 1 Kg (c) Kiloliter
   (b) Millilitre (d) None

3. **We measure Tank water as _____** [ ]
   (a)Galoons (c) Liters
   (b) Kiloliters (d) 00025kg

4. We measure milk and oil in as _____ [ ]
   (a) Kilogram (c) Kiloliter
   (b) Balance System (d) Metric System

5. **One decaliter is equal to _____** [ ]
   (a) 100 Liter (c) 10 Liter
   (b) 20 Liter (d) 1 Liter

AICU (ACADEMIC INTENSIVE CARE UNIT)

MATHS WORKSHEET: - PERIOD-21

MEASUREMENT

I. Answer the Following Questions

1. **Define Perimeter?**

Sol: _____ _____

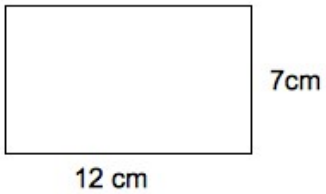
_____

_____

_____

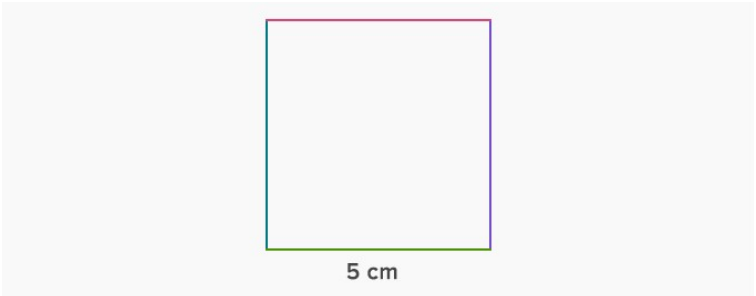
_____

2. **Find the Perimeter of the following Rectangle?**



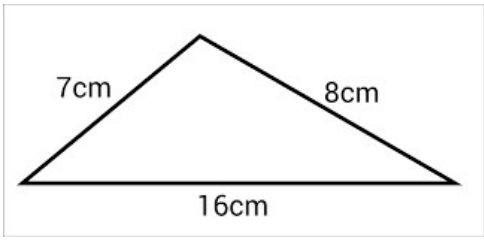
Sol:

3. **Find the Perimeter of the following Square?**



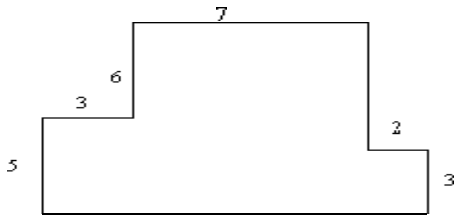
Sol

4. Find the Perimeter of the following Triangle**?**



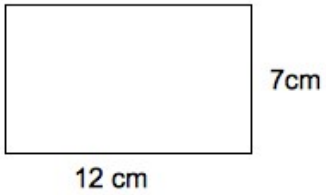
Sol:

5. Find the Perimeter of the following Curved Figure**?**



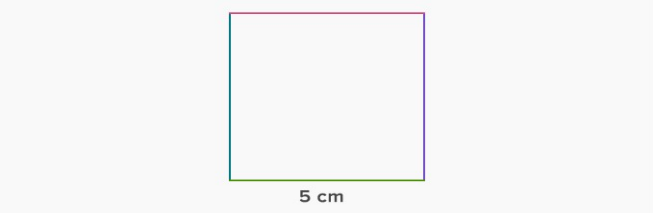
Sol:

6. Find the Area of the following Rectangle?



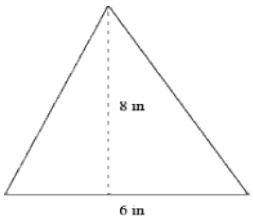
Sol:

7. Find the Perimeter of the following Square?



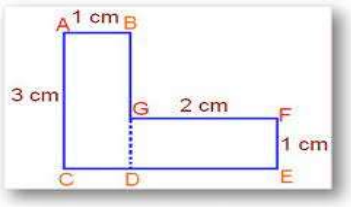
Sol

8. Find the Perimeter of the following Triangle**?**



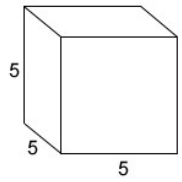
Sol:

9. Find the Perimeter of the following Curved Figure**?**



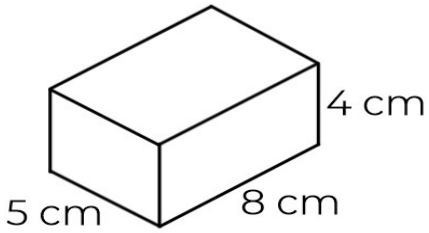
Sol:

10. Find the Volume of Cube?



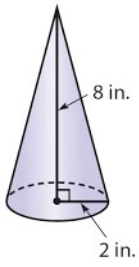
Sol:

11. Find the Volume of Cuboid?



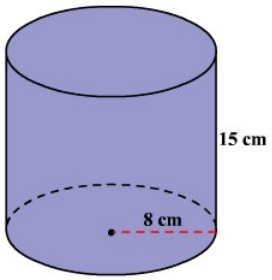
Sol:

12. Find the Volume of Cone?



Sol:

13. Find the Volume of Cylinder?

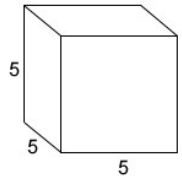


Sol:

14. Define Surface Area? And it's Types?

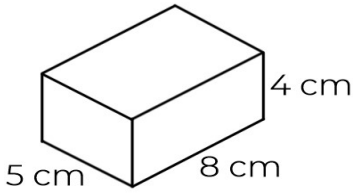
Sol: _____ _____
_____
_____
_____
_____

15. Find Surface Area of Cube?



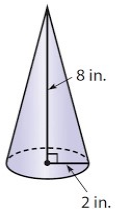
Sol:

16. Find the Surface Area of Cuboid?



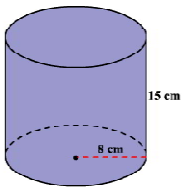
Sol:

17. Find the Surface Area of Cone?



Sol:

18. Find the Surface Area of Cylinder?



Sol:

III . Multiple Choice Questions

1. **Perimeter of Rectangle is _____** [ ]

(a) 2(l-b) (c) 2(l+b)
(b) 2l+2b (d) Both c and b

2. Perimeter of a shape is the distance _____the Shape [ ]

(a) Across (c) around
(b) Beside (d) in front

3. ∏ has the value of _____ [ ]

(a)22/7 (c) 3.14
(b) 33/2 (d) both a and c

4. **Surface Area referred to the area of the _____** [ ]

(a) Imposed Surface (c) Exposed Surface
(b) Inner Surface (d) Outer Surface

5. In General Lateral Surface Area does not include _____ [ ]

(a) Height (c) width
(b) Base (d) Length

6. **Lateral Surface Area does not include the area of _____** [ ]

(a) Sides (c) Top and Bottom
(b) Base (d) Length

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MATHS WORKSHEET: - PERIOD-22

TIME

1. Define Time and its Terminology?
   Sol:

2. Show Time using Number Line?
   Sol:

3. Draw Time (Half Past, Quarter Past, Quarter to)?
   Sol:

4. Define AM and PM using Diagram?
   Sol:

5. Write names of Seven days of the week?
   Sol:

6. Write Names of months in a year?
   Sol:

7. What is leap year? How to identify the leap year show using flowchart?
   Sol:

8. Name the Seasons of the year and their periods /months?
   Sol:

9. I wake up at 7:30 AM. It takes me 40 minutes to get ready for school; at what time am I ready for School?
   Sol:

III . Multiple Choice Questions

1. **We use little hand of watch to read the_____** [ ]
(a) Time (c) hour
(b) Minutes (d) seconds

2. We use big hand to read the [ ]

(a) Time (c) hour
(b) Minutes (d) seconds

3. Half past of 1:00 Pm is _____ [ ]

(a) 2:00 Pm (c) 1:30 Am
(b) 1:00 Am (d) 1:30 Pm

4. **A year which contains 366 days is called _____** [ ]

(a) Leap year (c) flop year
(b) Light year (d) flight year

5. By reading a calendar we can know about the current year, month, week and _____ [ ]
(a) Minutes (c) Day
(b) Weak (d) Length

7. **_____ is an example of social media platform** [ ]

(a) Notebook (c) face book
(b) Ledger book (d) yearbook

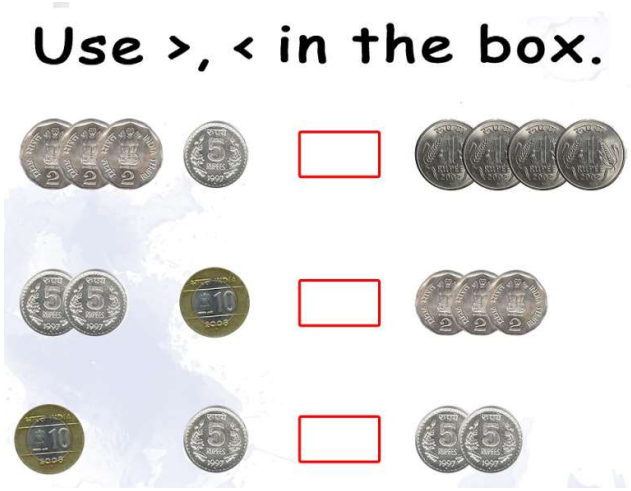
8. **A _____ clock uses only numerals to show the time** [ ]

(a) Analog (c) Digital
(b) Computer (d) Smart

MONEY

1. Define Money and its terminology?
   Sol:

2.



3. Jaspreet purchased 7 kg of sugar for Rs 280.50 Ps, and 9 kg of rice for Rs 630.00 ps. What is the total amount of Rupees he spends?

Sol:

4. Sunil purchased Stationary box of Rs 149.50 ps, he has given 50 Rs to Shop owner. How much money left with Sunil?

Sol:

5. If the cost of one Bicycle is RS 3500, then what is the cost of 25 bicycles?
   Sol:

6. 875 grams of sweets were distributed among 9 children. How much sweet was given to each child?

   Sol:

III . Multiple Choice Questions

1. **Money is acceptable as a means of _____** [ ]
(a) Time (c) hour
(b) Payment (d) Discount

2. Money is a medium of _____ [ ]

(a) Change (c) hour
(b) Rupees (d) seconds

3. Half past of 1:00 Pm is _____ [ ]

(a) 2:00 Pm (c) 1:30 Am
(b) 1:00 Am (d) 1:30 Pm

4. **A year which contains 366 days is called _____** [ ]

(a) Leap year (c) flop year
(b) Light year (d) flight year

5. By reading a calendar we can know about the current year, month, week and _____ [ ]
(a) Minutes (c) Day
(b) Weak (d) Length

9. **_____ is an example of social media platform** [ ]

(a) Notebook (c) face book
(b) Ledger book (d) yearbook

10. **A _____ clock uses only numerals to show the time** [ ]

(a) Analog (c) Digital
(b) Computer (d) Smart

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MATHS WORKSHEET: - PERIOD-25

BASIC GEOMETRY

1. Define line and its types? With Diagram?
   Sol:

2. What are the instruments do you find in your Geometric Box ?
   Sol:

3. How do you construct a Parallel line? Write the steps?
   Sol:

4. Construct a Circle of radius 4 cm? Write construction steps?
   Sol:

5. Construct a Square of side 4 cm? Write construction steps?
   Sol:

6. Construct a Hexagon using Geometry Box? Write Construction steps?

7. Draw (Front view, side view and Top View)
   (a) Cone (b) Cube

III . Multiple Choice Questions

1. **A Ray has ____ end point.** [ ]
(a) One (c)Two
(b) Three (d) Four

2. A cuboid has _____ faces [ ]

(a) Six (c) Seven
(b) Eight (d) Ten

3. Each face of cuboid is _____ [ ]

(a) Oval (c) Angle
(b) Square (d) Rectangle

4. **Surface area of a cube _____** [ ]

(a) $6a^2$ (c) $8a^2$
(b) $5a^2$ (d) $10a^2$

5. The value of π is _____ [ ]
(a) 33/7 (c) 22/7
(b) 11/7 (d) 52/7

6. The surface Area of a cone is _____ [ ]

(a) $\pi r^2 + \pi rs$ (c) $\pi r^4 + \pi rs$
(b) $\pi r^3 + \pi rs$ (d) $\pi r^2 + \pi s$

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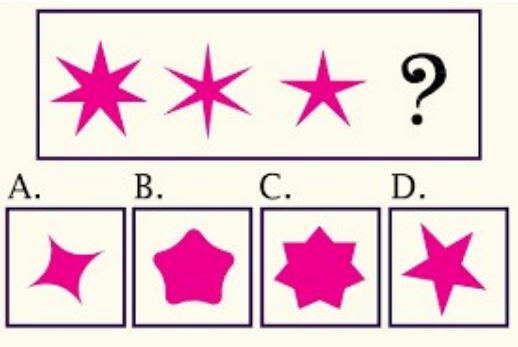
MATHS WORKSHEET: - PERIOD-26

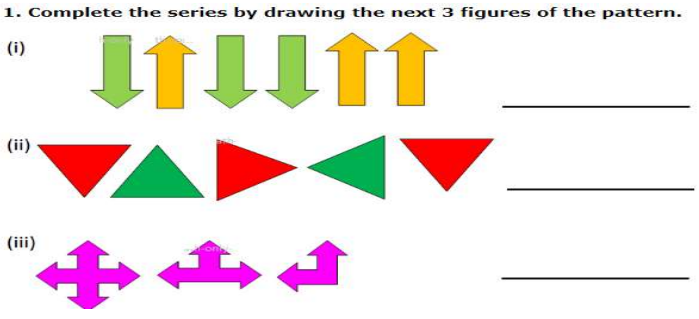
PATTERN

1. What comes next?



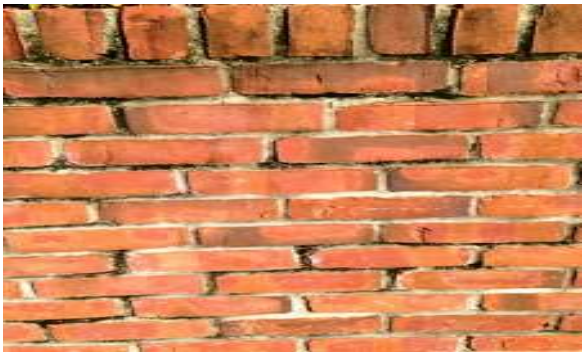
2. Which comes next?

3.

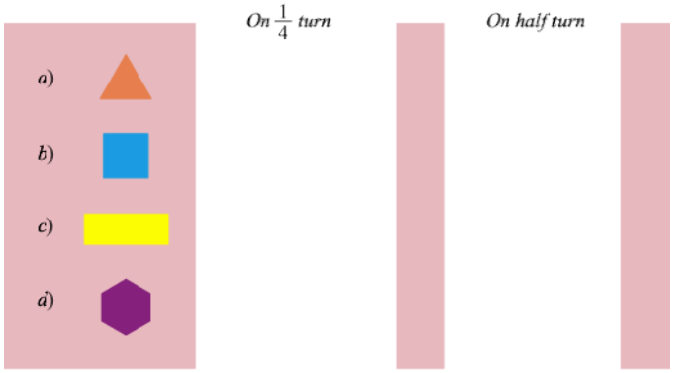


4. Find the Missing number in this Pattern?

5. Which is the Man made pattern or natural pattern?



6. Draw the pattern accordingly?



7. Make a list of Types of Pattern with Diagram?

SoL :

III . Multiple Choice Questions

1. 12, 4, 6, 8, 10, 12, 14, 16 …are sequential __numbers [ ]

(a) Odd (c) Prime
(b) Even (d) composite

2. 1, 3, 5, 7, 9, 11, 13, 15 … are sequential _____ numbers [ ]

(a) Even (c) Prime
(b)Odd (d) composite

3. Tessellations can also be made from more than one _____ [ ]

(a) Size (c) shape
(b) Square (d) Rectangle

4. **There are only _____ regular tessellations** [ ]

(a) Four (c) Four
(b) Two (d) Three

5. Example of Natural Pattern is _____ [ ]

(a) Leaves (c) Bricks
(b) 11111 (d) Tiles

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MATHS WORKSHEET: - PERIOD-27

PATTERN

1. Define Symmetry and Line of Symmetry? Draw figures?
   Sol:

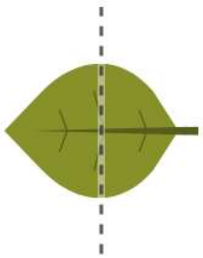
2. Define Vertical and Horizontal Line of Symmetry? Draw Figures?
   Sol:

3. Define Diagonal Line of Symmetry? Draw figure?
   Sol:

4. Define one line of Symmetry and Two line of Symmetry? Draw Figures?
   Sol:

5. Identify the line of symmetry?

Is the dotted line a line of symmetry?

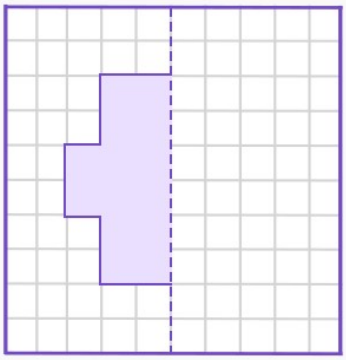


yes no

Is the dotted line a line of symmetry?

yes no

6. Complete the Below Picture?



7. Define Rotational and Translation Symmetry? Draw Figures?

III . Multiple Choice Questions

1. **In a Glide reflection the translation is first performed on figure then it is reflected over a _____**[ ]
(a) Point (c) angle
(b) Line (d) Ray

2. Reflection Symmetry is also known as _____ [ ]

(a) Mirror symmetry (c) Two Line symmetry
(b)One Line Symmetry (d) Translation symmetry

3. _____Symmetry is a line that runs down vertically [ ]

(a) Horizontial Line symmetry (c) Mirror Symmetry
(b) Diagonal Line symmetry (d) Verticle Line Symmetry

4. **Infinite line passing through the center and the figure is still symmetrical is _____** [ ]

(a) Triangle (c) circle
(b) Rectangle (d) Square

5. A _____Line of symmetry divides a shape into two identical halves is [ ]
(a) Circle (c) Line
(b) Diagonal (d) Translation

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MATHS WORKSHEET: - PERIOD-28

ALGEBRA

1. Define Algebra and its Terminology ?
   Sol:

2. Give an example of Algebric Expression?
   Sol:

3. Give an example of like and Unlike Terms?
   Sol:

4. Define Monomial, Binomial and Trinomial Expressions with examples?
   Sol:

5. Write the coefficient, Variable and Power of Algebric Terms **$3x^2+5x+6$** ?
   Sol:

6. Find the Degree of the following polynomials?

(a) $7x^2+3x$ (b) $3x^4+5x+1$ (c) $2x^5+7x^3$

7. Evaluate the following expressions for the given value of x

(a) 4X-5 for X=2 (b) $8X^2+16X+16$ for X=3 (c) 5X-2 for X=4

III . Multiple Choice Questions

1. **Algebra is a type of mathematics that uses _____ to represent numbers** [ ]

(a) Alphabets (c) Symbols
(b) Letters (d) Numbers

2. What is the Coefficient of x in $5x^2+6x+6$_____ [ ]

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

3. Find the variable in the expression 5x+4y+10 _____ [ ]

(a) x (c) y
(b) x and y (d) only y

4. **Find the Constant in the expression 5x+7= √2 _____** [ ]

(a) 5 (c) 2
(b) 7 (d) **√2**

5. In Trinomial the number of terms are _____ [ ]

(a) 2 (c) 0
(b) 1 (d) 3

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MATHS WORKSHEET: - PERIOD-29

ALGEBRA

1. Add (a) $5x^2+6x+7y$; $4x^2+8x+9y$ (b) $5y^2+6x+6$; $6y^2+10x+9$; $10y^2+100x+20$

2. Multiply (a) 6x ,7y (b) $7x^2$, 8z (c) 8x,7yz ,15z

3. What is an Algebric Equation? Give an Example?
   Sol:

4. Solve the following the Algebric Equations?
   (a) X+4=5 (b) 5-X=10 (c) 6x+5=2

5. Solve the given equations using Trial and Error method?
   (a) 3x-18=3 (b) 5y-2=3

6. Write the Algebric Equations of the following statements?
   (a) Three times the number x is equal to 10 _____
   (b) 6 times y subtracted from 9 equals to 36_____

7. Write the following Algebric Equations into statements?
   (a) 6x-5=10 : _____
   (b) 56+4x=0 : _____

8. Solve the equation x-5=4 using the Principal of Balance method?
   Sol:

III . Multiple Choice Questions

1. **Algebra is a type of mathematics that uses _____ to represent numbers** [ ]
(a) Alphabets (c) Symbols
(b) Letters (d) Numbers

2. What is the Coefficient of x in $5x^2+6x+6$_____ [ ]

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

3. Find the variable in the expression 5x+4y=10 _____ [ ]

(a) x (c) y
(b) x and y (d) only y

4. **Find the Constant in the expression 5x+7= √2 _____** [ ]

(a) 5 (c) 2
(b) 7 (d) **√2**

5. 7mn is a _____ [ ]
(a) Binomial (c) Monomial
(b) Trinomial (d) Nanomial

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MATHS WORKSHEET: - PERIOD 30

ALGEBRA

1. Solve **5x – m + 4 = 2m + 2x + 9 using Transposing Method?**

2. Determine whether 2 and 3 are roots of the equation $15 = x^2+2x$?

3. Mohsin is 10 years elder than Sajid. Five years ago mohsin was 3 times as old as Sajid .Then Mohsin's present age will be?

4. Subtract $3X^2+4X+16 - (2X^2-2X-8)$

5. Solve the following
   (a) $(4x -3) (5x^2 -2x +1)$
   (b) $7x^2+35x+24 \div (x+4)$

6. Draw a Graph of linear equation 2x+y = 6?

7. Define Zero of a Polynomial?

8. Examine whether x + 2 is a factor of $x^3 + 3x^2 + 5x + 6$.

III . Multiple Choice Questions

1. **If p(x) is a polynomial of degree n >** [ ]
(a) 0 (c) 2
(b) 3 (d) 1

2. If p (a) = 0 then x-a is a = _____ [ ]

(a) Factor (c) Solution
(b) Multiple (d) Zero

3. If a polynomial P(x) is divided by factor x-a , the remainder obtained is ____ [ ]

(a) P (a) (c) P (1)
(b) P(x-a) (d) P(x)

4. **Roots of the equation are such values of the variable that turn equation into correct _____** [ ]

(a) Inequality (c) Equality
(b) One (d) **Zero**

5. P(x) =x-1 at x=1 then P (1) _____ [ ]
(a) 0 (c) 2
(b) 1 (d) 3

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MATHS WORKSHEET: - PERIOD 31

RATIO AND PROPORTION

1. Define Ratios? And it's Terminology?

2. What are the Properties of Ratio?

3. Write Ratio form of the following diagram?

4. What is Equivalent Ratio? What is the Equivalent ratio of 2:3?
   Sol:

5. Write the ratios in simplest form and compare it 4: 8 AND 4: 16?
   Sol:

6. Increase and decrease 56 in ratio 7:8?
   Sol

7. Divide 560 Kg in the ratio 3:4?

8. The boys and the girls in the school are in the ratio 7:5 .If total length of the school be 500. Find the number of girls and boys?

III . Multiple Choice Questions

1. **Ratios are the comparison between the _____ of two things** [ ]
(a) Entity (c) Quantities
(b) Proportions (d) Surfaces

2. The Equivalent ratio of 6:8 is _____ [ ]

(a) 18/24 (c) 8:6
(b) 24/18 (d) 1:0

3. Ratios can be written in _____ form [ ]

(a) Divisional form (c) Popular form
(b) Complex form (d) simplest form

4. **A _____ Is a comparison of two numbers by division** [ ]

(a) Ratio (c) Equality
(b) Entity (d) **Proportion**

5. We can write 3:2 as _____ [ ]
(a) 2/3 (c) 3/2
(b) 5/2 (d) 3/5

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MATHS WORKSHEET: - PERIOD 32

RATIO AND PROPORTION

1. Define Proportion and its Terminology ?
   Sol:

2. Define Continued Proportion?
   Sol:

3. Define Mean proportion? Find mean Proportion between 9 and 16?
   Sol:

4. Define Third proportion? Find the third proportion to 15 and 20?
   Sol:

5. Define Unitary Method? The Cost of 8kg of Rice is Rs 104.What is the cost of 6 Kg of Rice?
   Sol :

6. What is inverse proportion? Give an example?
   Sol:

III . Multiple Choice Questions

1. _____**Proportion is when one quantity increases the other decreases at the same rate** **[ ]**

(a) Reverse (c) Direct
(b) Inverse (d) Surfaces

2. The Unitary method focuses on _____ [ ]

(a) Solution (c)Unit
(b) Method (d) Tens

3. If a :b = c:d , then c is called the _____proportional [ ]

(a) fourth proportion (c) first proportion
(b) Second proportion (d) third proportion

4. **Product of extremes = _____** [ ]

(a) Product of means (c) Subtract of extremes
(b) Entity (d) Product of seams

5. Speed is inversely proportional to _____ [ ]

(a) Road (c) Acceleration
(b) Time (d) meter

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MATHS WORKSHEET: - PERIOD 33

SHAHEEN

PERCENTAGE

1. Define Percentage and its terminology?
   Sol:

2. How to convert fractions into Percentage? Give an example?
   Sol:

3. How to convert Decimals into percentage? Give an example?
   Sol:

4. How to convert a Ratio into Percentage? Give an Example?
   Sol:

5. Sahil scored 23 out of 30 in English and 36 out of 40 in Maths .By finding the percentage score for each, which is the best subject?
   Sol:

III . Multiple Choice Questions

1. **We use _____symbol for percent** **[ ]**
(a) $ (c) %
(b) @ (d)!

2. The Unitary method focuses on _____ [ ]

(a) Solution (c) Unit
(b) Method (d) Tens

3. If a: b = c: d, then c is called the _____proportional. [ ]

(a) Fourth proportion (c) first proportion
(b) Second proportion (d) third proportion

4. **Product of extremes = _____** [ ]

(a) Product of means (c) Subtract of extremes
(b) Entity (d) Product of seams

5. Speed is inversely proportional to _____ [ ]
(a) Road (c) Acceleration
(b) Time (d) meter

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MATHS WORKSHEET: - PERIOD 34

PERCENTAGE

1. Convert 28% into Decimal and Fraction?

   Sol:

2. Convert 35 % into Ratio?

   Sol:

3. Write 42 as a percentage of 75?

   Sol:

4. 12 is 40% of what number?

   Sol

5. A school team won 6 games this year against 4 games won last year. What is the percent increase?

   Sol:

6. The number of illiterate person in a country decreased from 150 lakhs to 100 lakhs in 10 years. What is the percentage of decrease?

   Sol:

7. What is 8% of 868 and 10 % of 32?

   Sol:

8. Define Cost Price and Selling Price?

   Sol:

9. What is overhead Prices?

III . Multiple Choice Questions

1. **Profit if _____** [ ]

(a) SP > CP (c) %
(b) CP >SP (d) LOSS

2. Loss if _____ [ ]

(a) CP >SP (c) Unit
(b) SP > CP (d) Tens

3. Part/Whole x 100 = _____ [ ]

(a) $ (c) %
(b) @ (d) #

4. **Ratio of 35 % is = _____** [ ]

(a) 20:7 (c) 7:20
(b) 200 :7 (d) 7:200

5. Convert 28 % into fraction as _____ [ ]

(a) 25/7 (c) 25:7
(b) 7/25 (d) 7:25

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MATHS WORKSHEET: - PERIOD 35

PERCENTAGE

1. Define Simple Interest?

   Sol:

2. Define Compound Interest?

   Sol:

3. Difference between Simple Interest and Compound Interest?

   Sol:

4. Define Conversion Period with example?

   Sol:

5. A 2 year loan of Rs 500 is made with 2 % interest .Find the interest earned ?

   Sol:

6. Define Appreciation and Depreciation?

Sol:

7. Define discount and discount percent?

Sol:

8. What is Tax and its types?

Sol:

9. What is Income Tax?

Sol:

10. Define VAT (Value Added Tax) and it's Advantageous and Disadvantageous?

Sol:

III . Multiple Choice Questions

1. Amount =Principle+ _____ [ ]
(a) Simple interest (c) Compound Interest
(b) Loss (d) Profit

2. Compound Interest can be thought as "Interest _____ [ ]

(a) in interest (c) under interest
(b) Below interest (d) on interest

3. Simple interest is _____ than Compound interest [ ]

(a) Bigger (c) Higher
(b) Smaller (d) Lower

4. **In Simple Interest, Interest for all years is _____** [ ]

(a) Different (c) Same
(b) Discount (d) connected

5. Appreciation is going _____ in value [ ]
(a) Near (c) down
(b) Beside (d) Up

6. **Discount = List Price -** _____ [ ]
(a) Cost Price (c) Label Price
(b) Selling Price (d) Discount Price

7. **Direct taxes are paid directly to the** _____ [ ]
(a) Factories (c) society
(b) citizens (d) Government

8 Service tax is applicable to whole of India except _____ [ ]
(a) Jammu & Kashmir (c) society
(b) citizens (d) Government

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MATHS WORKSHEET: - PERIOD 36

BASIC GEOMETRY AND CONSTRUCTION

1. Define Vertex and Angle?
   Sol:

2. What are the types of angles show with diagrams?
   Sol:

3. What are complementary and supplementary angles show with diagram ?
   Sol:

4. What are Adjacent and Vertically opposite angles? Show with diagram?
   Sol:

5. Define Linear Pair of angles? Show with diagram?
   Sol:

6. What is a Transversal of Parallel line? Show with Diagram?
   Sol:

7. Construct a 60^0 angle using Compass?
   Sol:

III . Multiple Choice Questions

1. Two rays that share the same end point form an _____ [ ]
(a) Ray (c) Angle
(b) Line (d) Vertex

2. The point where the rays intersect is called _____ [ ]

(a) Angle (c) Ray
(b) Vertex (d) Line

3. Acute angle is less than _____ [ ]

(a) 50^0 (c) 360^0
(b) 90^0 (d) 180^0

4. **Full angle is _____** [ ]

(a) 0^0 (c) 180^0
(b) 90^0 (d) 360^0

5. Complementary angles add to _____ [ ]
(a) 90^0 (c) 45^0
(b) 0^0 (d) 360^0

6. Supplementary angles add to _____ [ ]
(a) 90^0 (c) 180^0
(b) 360^0 (d) 100^0

7. **A transversal is a line that crosses other_____** [ ]
(a) Stations (c) Points
(b) Lines (d) rays

SHAHEEN

BASIC GEOMETRY AND CONSTRUCTION

1. Construct an angle 40^0 using Protractor and write its steps?
   Sol:

2. Define angle bisector? Show with diagram?
   Sol:

3. How to divide angles using compass? Write steps?
   Sol:

4. Construct a triangle ABC given that AB=4cm, BC=6cm and AC=5cm?
   Sol:

5. Construct a triangle ABC given that PQ=4 cm, QR=6.5 cm and angle PQR=60^0?
   Sol:

6. Construct a triangle XYZ given that XY=6cm angle ZXY=30^0 and angle XYZ=100^0 Find the third angle ?
   Sol:

III . Multiple Choice Questions

1. **We use protractor to measure _____** [ ]

(a) Ray (c) Angle
(b) Line (d) Vertex

2. Any Point on the bisector of an angle is _____from the sides of an angle [ ]

(a) Near (c) distant
(b) Equidistant (d) Far

3 In a Triangle when the lengths of all the three sides are given we construct triangle with ___ [ ]

(a) Compass and Ruler (c) Square set
(b) Protractor (d) Divider

4. **The angle of straight line is _____** [ ]

(a) 0^0 (c) 180^0
(b) 90^0 (d) 360^0

5. The angles are usually measures in _____ [ ]

(a) Radian (c) degrees
(b) Celsius (d) Fahrenheit

6. The Standard Size of the Protractor is _____ [ ]

(a) 90^0 (c) 180^0
(b) 360^0 (d) 120^0

7. **There are _____ sets of numbers in protractor** [ ]

(a) One (c) Three
(b) Two (d) five

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MATHS WORKSHEET: - PERIOD 38

SHAHEEN

DATA HANDLING

1. Define Data and its types?
   Sol:

2. Give examples of Collection of data?
   Sol:

3. In How many ways we can organize data?
   Sol:

4. What are the methods of Data Collections?
   Sol:

5. Define

   (a) Raw Data : _____
   _____
   _____
   _____
   _____

   (b) Range : : _____
   _____
   _____
   _____
   _____

   (c) Tally Marks: _____
   _____
   _____
   _____
   _____

6. Draw Frequency Distribution Table and show its various parts?
   Sol:

7. Define Discrete and Continuous variables?
   Sol:

8. Draw Bar graph and its Properties?
   Sol:

9. Define Pictograph and show with an example?
   Sol:

10. Define Line Charts and show its parts?
    Sol:

III . Multiple Choice Questions

1. **The _____Graph can be plotted vertically or horizontally** [ ]
(a) Pie (c) Line
(b) Bar (d) double bar

2. Bar graphs are an effective way to compare items between different _____ [ ]

(a) Axes (c) groups
(b) Tables (d) lines

3 _____is a circular statistical graphic, which is divided into slices to illustrate numerical Proportion [ ]

(a) Pizza chart (c) Pie Chart
(b) Donut Chart (d) Line chart

4. **The Circle Chart is also known as _____** [ ]

(a) Bar graph (c) Die Chart
(b) Pie graph (d) Line chart

5. A _____ graph **is a type of** chart **used to show information that changes over time** [ ]

(a) Line Graph (c) Pie graph
(b) Double Line Graph (d) Sensex graph

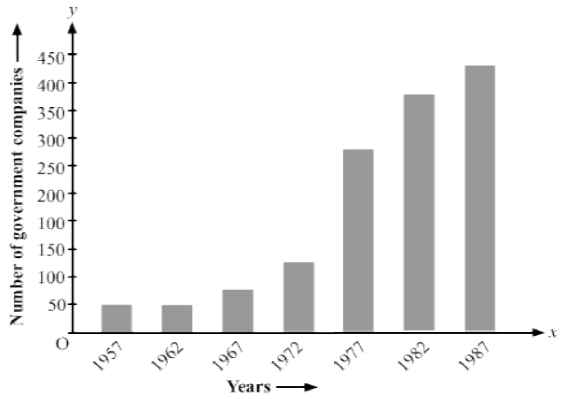
6. We use _____ bar graph to compare two data groups [ ]
(a) Single (c) double line
(b) Double (d) line

7. **_____ is used to summarize discrete or continuous data that are measured on an interval scale**. [ ]
(a) Pie Chart (c) Histogram
(b) Line Graph (d) Bar Graph

SHAHEEN

DATA HANDLING

1. Read the following bar graph and answer the following questions:



(i) What is the information given by the bar graph?

(ii) State each of the following whether true or false.

(a) The number of government companies in 1957 is that of 1982 is 1: 9.

(b) The number of government companies has decreased over the year 1957 to 1983.

Sol:

2. The names of the heads of some families in a village and the quantity of drinking water their family consumes in one day are given below. Draw a bar graph for this data.
(Scale: On Y - axis, 1cm = 10 litres of water). Note :Draw using Graph Paper

Name	Ramesh	Shobha	Ayub	Julie	Rahul
Litres of water used	30 litres	60 litres	40 litres	50 litres	55 litres

Sol:

3. Draw a Double bar graph for the following data given in the table. Note: Draw using Graph Paper

Student	Maths	Hindi
A	20	10
B	30	25
C	10	10
D	15	40

Sol:

5. Percentage of pass in SSLC Examination of a school is given. Draw a line graph. Note: Draw using Graph Paper

Year	Percentage of pass
1999	30
2000	40
2001	70
2002	50

Sol:

6 Define Mean, Median, Mode and find them for the following data
7,3,4,1,7,6 ?
Sol:

7. Construct a histogram for the following frequency distribution table that describes the frequencies of weights of 25 students in a class. Note :Draw using Graph Paper

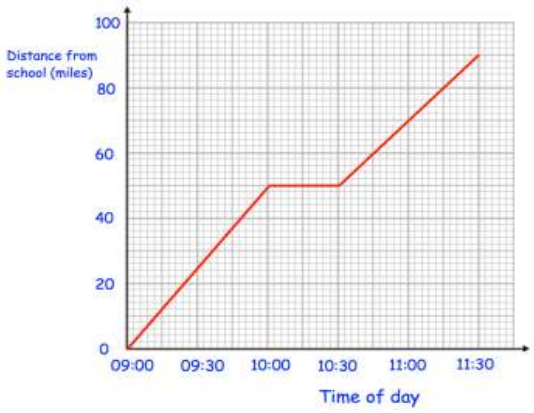
Weights (in lbs)	Frequency (Number of students)
65 - 70	4
70 - 75	10
75 - 80	8
80 - 85	4

Sol:

8. Plot the point (2,3) in the Cartesian Plane ? Note : Draw in Graph Paper
   Sol:

9. Define direct and indirect variation in Cartesian plane? Note : Draw in graph Paper
   Sol:

10. The distance-time graph shows class 8A's journey to the zoo. They stopped for a picnic on the way to the zoo.



   (a) What time did the bus leave school?
   (b) What time did they stop for a picnic?
   (c) How far had they travelled when they stopped for a picnic?
   (d) How long did they stop for?
   (e) What time did they arrive at the zoo?
   (f) How far is the zoo from school?
   Sol:

III . Multiple Choice Questions

1. **The _____ Paper is used to draw graphs** [ ]
(a) Pie (c) Line
(b) Bar (d) Graph

2. A frequency polygon is almost identical to _____ [ ]

(a) Histogram (c) groups
(b) Tables (d) lines

3 _____ deals with the collection of data and information [ ]

(a) Pizza chart (c) Pie Chart
(b) Information & Technology (d) Statistics

4. **A_____ graph shows how far an object has travelled in a given time.** [ ]

(a) Bar graph (c) Distance-Time Graph
(b) Pie graph (d) Line chart

5. In _____ **variation y is directly proportional to x** [ ]

(a) Indirect (c) Pie graph
(b) Double Line Graph (d) direct

6. In _____ **variation y is indirectly proportional to x** [ ]

(a) Indirect (c) Pie graph
(b) Double Line Graph (d) direct

7. _____ Plane is a two dimensional plane. [ ]
(a) Pie Chart (c) Histogram
(b) Co-ordinate plane (d) Bar Graph

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MATHS WORKSHEET: - PERIOD 40

RATIONAL NUMBERS

1. Define Rational Number and its types? Given examples
   Sol:

2. Define Irrational Number? Give an example.
   Sol:

3. Define Absolute Value of a Rational Number? Give an example
   Sol:

4. Compare the given rational numbers 4
   Sol:

III . Multiple Choice Questions

1. **"1" is called as _____ number** [ ]

(a) Unit (c) Odd
(b) Unique (d) Even

2. The first whole number is _____ [ ]

(a) One (c) Ten
(b) Zero (d) infinity

3 _____ is the set of whole numbers and their opposites. [ ]

(a) Integers (c) Whole numbers
(b) Fractions (d) Decimals

4. **The whole number zero has no _____ .** [ ]

(a) Successor (c) one
(b) Predecessor (d) End

5. _____ is neither Positive nor negative [ ]

(a) Integers (c) Zero
(b) one (d) Whole number

6. Fraction is a part of a _____

(a) Whole number (c) Pie graph
(b) integers (d) Whole

7 . All Natural Numbers are also _____ Numbers [ ]

(a) Negative (c) Whole numbers
(b) Co-ordinate plane (d) Positive