

SUB : MATHS REVISION WORKSHEET**PLAYING WITH NUMBERS**

1. Give a pair of co primes between 25 and 50.
2. Three tankers contain 403 litres, 434 litres and 465 litres of diesel respectively. Find the maximum capacity of a container that can measure the diesel of the three containers exact number of times.
3. Find the LCM of 20, 24 and 36 by division method.
4. Find the HCF of 128 , 84, 154
5. Test whether the number 9020814 is divisible by 11 or not.
6. Express 32 and 80 as a sum of two odd primes.
7. Test the divisibility of the following numbers by 9
 - a) 2345678
 - b) 273645
8. Three different containers contain 527 apples, 646 pears and 748 oranges. These are to be arranged in heaps containing the same number of fruits. Find the greatest number of fruits possible in each heap. How many heaps are formed?
9. Find the HCF of a) two prime numbers b) two co primes c) two consecutive numbers
10. In a shop, there are three clocks which chime at intervals of 10, 25 and 30 minutes respectively. They all chime together at 11 a.m. At what time will they all chime together again?
11. Find the least number divisible by 15, 20, 24, 32 and 36.

INTEGERS

1. What do we get if we subtract -12 from - 6?
2. What is the additive inverse of - 8?
3. The point A on a mountain is 6450 metres above sea level. Another point B is in a mine 48600 metres below sea level. Find the distance between the two points.
4. The temperature in Shimla one night was - 4°C and the next day the temperature went upto 7 °C. Find the range of temperature
5. The sum of two integers is 65. If one of the integers is - 47, find the other.
6. Subtract 18 from - 34
7. a) Arrange the following in ascending order: - 5, 65 , - 9 , - 45 , 0
b) Use the number line to add the following integers:
 $3 + (- 2)$
8. a) Arrange in ascending order: - 3, 8, - 7, - 8
b) What is the successor of - 8 ?
9. Subtract the sum of 225 and (-35) from 921.
10. Find the sum
 - a. $200 + (-55) + (-77) + (- 68)$
 - b. $703 + (-3) + (- 1) + (- 400)$
11. A car was 50 Km due north of Delhi and then 70 Km due South. How far from Delhi was the car finally?

12. A hotel in Greenland is made entirely of ice. The outside temperature is -35°C and the inside temperature of a room is -10°C . What is the difference between the inside and outside temperatures?

PRACTICAL GEOMETRY

- Construct the following angles using ruler and compasses:
a) 105° b) 45° c) 150° d) 120°
- Draw a line segment AB, 10 cm long. Use ruler and compasses to divide AB into 4 equal parts.
- Construct an angle of 90° and create a copy of the angle.
- Draw a line segment take a point away from it; draw a perpendicular to the line passing through that point.
- Draw a circle with radius of 5 cm and construct a perpendicular bisector on any of its diameters.

MENSURATION

- A room is 8m long and 6 m wide. Its floor is to be covered with rectangular tiles of size 25cm by 20 cm. How many tiles will be required? If a man can pave 96 tiles in one day if he works for the entire day how many days will he work?
- The length and breadth of a play ground are 75 m 20 cm, and 34 m 80 cm respectively. Find the cost of levelling it at ₹ 1.50 per square metres.
- Find the length of a rectangle whose breadth is 4 cm and area is 20 cm.
- A rectangular garden is 120 m by 100 m. How many rounds of this garden will a boy make if he covers 2200 metres?
- Find the perimeter of
 - a square with side of length 8 cm
 - equilateral triangle with side of length 5 m.
 - an isosceles triangle with equal sides 4 cm each and third side 6 cm.
- X has an orchard of length and breadth 280 m and 200 m respectively. He wants to fence it with 4 rounds of barbed wire. Find the cost of fencing at ₹ 35 per metre.
- The perimeter of a rhombus is 56 cm. If its each side is halved, what will be the perimeter now?
- Find the length of the rectangle if breadth is 30 cm and area is 9 sq.m.

UNDERSTANDING ELEMENTARY SHAPES

- State which type of triangles are these?
 - $65^{\circ}, 95^{\circ}, 20^{\circ}$
 - $140^{\circ}, 20^{\circ}, 20^{\circ}$
- Give reasons for the following:
 - A square can be thought of as a special rectangle
 - All rhombuses are parallelograms.
- Correct the incorrect statements:
 - A triangle can have more than one right angle.
 - A triangle with all sides of different lengths is called an isosceles triangle.

4. Draw rough sketch of each of the following:
 - a. Isosceles right angled triangle
 - b. A regular hexagon with any two of its diagonals.
5. Answer the following:
 - Which direction will your face if you start facing north and make $\frac{3}{4}$ of a revolution anti-clockwise?
 - What part of a revolution have you turned if you stand facing east and turn clockwise to face north?
 - Find the number of right angles turned through by the hour hand of a clock when it goes from 12 to 9.
 - Where will the hour hand of a clock stop if it starts from 6 and turns through 3 right angles?
6. Draw a tetrahedron, label it and write the other name of it. Write its number of faces, edges and vertices.
7. If the sum of two angles is greater than 180, then which of the following is not possible for the two angles?
 - a. One obtuse angle and one acute angle
 - b. One reflex angle and one acute angle
 - c. Two obtuse angles
 - d. Two right angles
8. How many edges, faces and vertices are there in a sphere?
9. Draw all the diagonals of a pentagon ABCDE and name them?
10. Draw a rough sketch of a triangular prism Write its number of faces, edges and vertices.
11. Are these statements true or false
 - a. All angles in a regular polygon are equal
 - b. All polygons have 4 sides
 - c. A heptagon has 7 sides and 6 angles
 - d. A triangle has 3 vertices
 - e. All equilateral triangles are isosceles also.

RATIO AND PROPORTION

1. What is ratio of a dozen to a gross?
2. The ratio of the income to the expenditure of a family is 7:6. Find the savings if the income is ₹ 21000.
3. A bus travels from Delhi to Lucknow and collects ₹ 4500 from 36 passengers and on its way back it has only 19 passengers. What is the price of one ticket and what is the total amount collected by the bus in one complete trip?
4. Weight of 72 books is 9 kg
 - a. What is the weight of 90 such books?
 - b. How many such books weigh 7 kg?
5. A machine prints 1500 newspapers in 45 minutes. How many will it print in 2 hours?

6. 15 iron balls of same size weigh 10 kg 50 gm. How many of them will weigh 4 kg 690 gms?
7. Determine if $2\text{kg} : 80\text{ gm}$ and $25\text{ gms} : 625\text{ gm}$ form a proportion.
8. The length and breadth of a room are in the ratio of $7 : 6$. Find the length if the breadth is 12 m.
9. Divide one hour in the ratio of $2:3$.
10. What is greater? $5:7$ or $9:14$
11. A gold smith mixes gold and copper in the ratio $5:8$. Another goldsmith mixes these in the ratio $7: 2$. Which quantity is better?

ALGEBRA

1. A class with 'p' students has planned a picnic. ₹ 50 per student is collected, out of which ₹ 1800 is paid in advance for transport . How much money is left with them to spend on other items?
2. Give expression for each of the followings:
 - a. 13 subtracted from thrice of a number
 - b. Megha's age is 2 more than 5 times her daughter's age.
3. Sunita is half the age of her mother. Find their ages
 - a. after 4 years?
 - b. before 3 years?
4. On my last birthday, I weighed 40 kg, If I put on m kg of weight after a year, what is my present weight?
5. What is the area of a square whose side is m cm?
6. Length and breadth of a board are r cm and t cm, respectively. What will be the length of aluminum strip required to frame the board, if 10 cm extra strip is required to fix it properly?
7. If Raj and Sonu sells bananas , Raj sold p bananas and Sonu sold 10 more bananas. Express the total number of bananas sold by the two.
8. Ramya is 4 years older than Tanya. If Tanya's age is y years, what is Ramya's age in terms of y?
9. Monu got 89 marks in Maths while Tonu got x more marks than Monu. Write an expression for Tonu's marks.
10. Complete the following table and find the solution of the equation $2m - 5 = 3$

m	1	2	10	4
$2m - 5$				

11. Maria and John are climbing steps to a hill top. If Maria is at steps s , and the total number of steps to the hill top is 8 less than 5 times the number of steps Maria has climbed. Write an algebraic expression for the total number of steps.
12. Change the following expressions into statements in ordinary language:
- a) Meenu has s roses, Mala has $2s$ roses.
 - b) Munna's age is x years and his uncle's age is $(2x-5)$ years
12. Anagha and Sushant are selling apples. Anagha sells ' p ' number of apples, Sushant sells 10 apples more than Anagha. Express the number of apples sold by Sushant in terms of ' p '. If they sell each apple at ₹ 15, what is the amount of money Anagha and Sushant get at the end of the day?