

**DELHI PUBLIC SCHOOL
BOKARO STEEL CITY**

ASSIGNMENT FOR THE SESSION 2009-2010

Class : VI

Subject : Mathematics

Assign. No. 3

1. Define the following terms :
i) Obtuse angle ii) Reflex angle iii) Acute angle
2. A ship is sailing in river Jhelum moves towards east. If it changes to north, through what angle does it turn.
3. A bicycle wheel makes four and a half turns. Find the no. of right angles through which it turns.
4. You are standing in a class-room facing north. In what direction are you facing after making a quarter turn?
5. What kind of angle is formed by the hands of a clock when they indicated :
i) 9 O' Clock ii) 6 O' Clock iii) 4 O' Clock
6. Define the following :
i) Rectangle ii) Rhombus iii) Trapezium iv) Square
7. Can you draw a triangle having :
i) exactly one line of symmetry ii) three lines of symmetry iii) no line of symmetry
8. Which of the following numerals are symmetrical? Draw the line(s) of symmetry, if any :
a) 2 b) 3 c) 4 d) 8 e) 9
9. On a squared paper, sketch the following :
i) a triangle with a horizontal line of symmetry but no vertical line of symmetry .
ii) a quadrilateral with both horizontal and vertical line of symmetry .
iii) a hexagon with exactly two lines of symmetry .
10. Kamala and Shakeela go for jogging every morning, Kamla goes around a square field of side 200m. Shakeela goes around a rectangular field of length 300m and breadth 110m. If they both take three rounds, who covers the greater distance and by how much?
11. Find the perimeter of an isosceles triangle ABC, with $AB=AC= 10$ cm and altitude from A on BC equal to 8 cm.
12. The area of a rectangle is 240 sq. cm. If its length is 20 cm, find its breadth.
13. What will happen to the area of a rectangle if
(i) its length is doubled and breadth is trebled (ii) its length and breadth are doubled ?
14. The total cost of flooring a room at Rs.8.50 per square metre is Rs.510. If the length of the room is 8 metres, find its breadth.
15. A wall 4.41 m long and 3.5 m high is to be plastered with rectangular tiles of size 21 cm by 7 cm. Find the total cost of the tiles if a tile is available for Rs 3.50.
16. A rectangular metal plate is 5 dm 4 cm long and 4 dm 3 cm wide. If the metal cost Rs 75 per sq. m, find the cost of the metal plate.
17. One side of a square plot is 300 m. Find its area. Also, find the cost of levelling it, if the rate for levelling is Re 0.50 per sq. m.
18. Find the area of rectangle if its length and breadth are 28 cm and 120 mm resp.
19. Find the ratio of
(a) 3.80:0.019 (b) 2 kg and 400 gm
20. Shrikant and Suresh started a business and invested capital in the ratio of 3:4. It was decided that the profit will be divided in the ratio of their investment. Find the share of each in a total profit of Rs 56,000 at the end of the year.
21. Which of the following form a proportion
(a) 15,20,35,50 (b) 10,21,4,8.4
22. Find the third proportion of $3.5 : 3 :: x : 6$.
23. Find the mean proportion of 4 and 16.
24. Sushil's salary for 9 months is Rs 21,000, find his salary for 15 months.
25. In a college, out of 4320 students, 2300 are girls. Find the ratio of
(a) No. of girls to the total no. of students
(b) No. of boys to the no. of girls (c) No. of boys to the total no. of students

26. Cost of a dozen pens is Rs 180 and cost of 8 ball pens is Rs 56. Find the ratio of cost of a pen to the cost of a ball pen.
27. A women worker earns Rs 18,000 in 15 months
(i) How much does she earns in 7 months (ii) In how many months will she earn Rs 30,000
28. 25 bags of wheat each weighing 40 kg cost Rs 2750. Find the cost of 35 bags of wheat, if each bag weight 50 kg.
29. Construct any triangle ABC. Draw the perpendicular bisector of the side BC.
30. Draw a circle and any two of its diameter. If you join the ends of these diameters, what is the figure obtained? What figure is obtained if the diameters are perpendicular to each other?
31. Draw a rectangle whose two adjacent sides are 5 cm. and 3.5 cm. Make use of a pair of compass and ruler only.
32. A Line XY is given and P is a point on it. Draw a line through P, perpendicular to XY.
33. Draw an angle and label it as $\angle PQR$. Construct another angle $\angle BAC$ such that $\angle BAC = 3\angle PQR$.
34. Construct the following angles with the help of ruler & compass only :
i) 30° ii) 45° iii) 90° iv) 135°
35. Draw a line segment of length 6.6cm. Bisect it and measure the length of each part.
36. Draw a circle of radius 4cm. Draw any two of its chords. Construct the perpendicular bisectors of these chords. Where do they meet?
37. Construct the following angles with the help of a protactor
i) 38° ii) 110° iii) 45° iv) 85°
38. Draw an angle of measure 105° and bisect it. Also write its steps.
39. A dice was thrown 25 times and following scores were obtained ;
1,5,2,4,3,6,1,4,2,5,1,2,6,6,3,5,4,1,3,2,3,6,1,5,2,
prepare a frequency table of the scores.
40. Define the following terms :
i) Primary data ii) Secondary data iii) Frequency iv) Pictograph
41. A student of a class was asked to find out the no. of students in different classes (std. vi to x) of his school . The no. of students class-wise was as under :
VI (90), VII(80), VIII(70), IX(50), X(40)
Represent this data with the help of a pictograph.
42. The following table shows the average rainfall in the month of June to November in Mumbai.
Months: June July Aug. Sept. Oct. Nov.
Rainfall(in cm) 24 30 36 28 20 4
Draw the bar graph and answer the following questions :
i) What is the highest rainfall in the season?
ii) Which month has the least rainfall?
iii) What is the total rainfall in the season?
43. The result of pass percentage of class X and XII in C.B.S.E. examination for 5 years are given in the following table :
Years 1994-95 1995-96 1996-97 1997-98 1998-99
X 90 95 90 80 98
XII 95 80 85 90 95
Draw bar graphs to represent the data.
44. The result of a Science test is as follows :
70, 80, 90, 80, 80, 60, 80, 70, 90, 65, 100, 60, 70, 60, 70, 85, 65, 70, 70, 85, 90, 60, 65, 80, 60.
Make a frequency table for the above data & answer the following questions :
i) What is the maximum marks obtained ?
ii) How many students scored less than 75 marks ?
iii) How many students scored 80 marks or above ?
iv) How many students appeared in the test ?
45. Fill in the blanks :
i) Data means information in the form of
ii) Data obtained in the form is called raw data .
iii) Arranging the data in the form of a table is called
iv) The no. of times a particular observation occurs is called its