THE VILLAGE
INTERNATIONAL SCHOOL

Worksheet:15
Chapter15:Constructions

Subject: Mathematics
Class: VI

1. Construct a line segment PQ of measure 7 cm using:

   1) only ruler 2) ruler and compass

2. Construct lines PQ = 8 cm and RS = 5.5 cm. Construct line segments:

   1) UV = PQ + RS 2) XY = PQ – RS

3. Draw AB of length 12.7 cm. Choose a point P on it, such that AP = 6.1 cm. Cut off PQ from AB such that AB = 4.3 cm. Measure QB.

4. Draw a line segment RS of length 3.6 cm. Construct a line XY of thrice the length of RS using a divider. Measure its length.

5. Draw line segments EF of length 5.4 cm, GH of length 4.2 cm and IJ of length 2 cm. Construct a line AB of length equal to the sum of the lengths of the three segments using a compass. Measure the length of AB.

6. Which angles will you combine using set squares to obtain the given angles?

   1) 75° 2) 120° 3) 135° 4) 150°

7. Draw any shape in which one of the angles is:

   1) 30° 2) 45° 3) 90° 4) 105°

   Use set squares to construct each angle.

8. Construct angles of the given measures using a protractor.

   1) 36° 2) 142° 3) 90° 4) 167°

9. Bisect an angle of measure 88° using a ruler and compass.

10. Define perpendicular and parallel lines.

11. Bisect a line segment GH = 12 cm using ruler and compass.

12. Draw a line and mark on it a line segment PQ = 9 cm. Using set squares draw another line segment XY parallel to PQ at a distance of 5 cm from it.

13. Make an angle ABC = 75°. Choose a point P on ray AB such that BP = 5 cm. Using set squares draw a line PR (passing through P) and parallel to ray BC.

14. Construct a circle with the given line as radius. Measure the radius and the diameter of the circle. Check if the diameter is twice the radius.

O_____ P

15. Bisect an angle XYZ of measure 126°. Measure each angle.

16. Construct an angle of measure 105° using a compass. R. Bisect a right angle. What is the measure of each bisected angle.