



INDIAN SCHOOL DARSAIT
DEPARTMENT OF MATHEMATICS
WORKSHEET # 16



Subject : MATHEMATICS Topic : CONSTRUCTIONS Date of Worksheet : 20/11/2017

Resource Person: Mrs. Indu .P

Date of submission : 30/11/2017

Name of the Student _____ Class & Division: _____ Roll Number : ____

S.No.

Section A-[Basic skills]

- 1 . Find 80% of 4000
2. $\frac{4}{5} - \frac{7}{15} + \frac{8}{20}$
3. Simplify $(x + 2)(x - 7)$
4. Find 3478×38
5. Find $12890 \div 13$

Sl.NO.

Section B -[Chapter based questions]

Marks

1. Draw a line segment of length 8 cm and divide it in the ratio 3:2. Measure the two parts 2
2. Construct a triangle with sides 4 cm, 5 cm and 6 cm and then another triangle whose sides are $\frac{8}{5}$ of the corresponding side of the first triangle. 4
3. Construct an isosceles triangle whose base is 6 cm and altitude 5 cm and then another triangle whose sides are $\frac{4}{3}$ times the corresponding sides of the isosceles triangle. 4
4. Draw a triangle ABC with side BC= 7cm, AB=6cm and $\angle ABC = 45^\circ$. Then construct a triangle whose sides are $\frac{2}{3}$ of the corresponding sides of the triangle ABC. 4
5. Draw a triangle ABC with side BC=6 cm $\angle B=30^\circ$, $\angle A=120^\circ$, Then construct a triangle whose sides are $\frac{4}{3}$ times the corresponding sides of ΔABC . 4
6. Draw a right triangle in which the side(other than hypotenuse) are of length 4 cm and 3 cm. Then construct another triangle whose sides are $1\frac{3}{4}$ times the corresponding sides of the given triangle. 4
7. Draw a pair of tangents to a circle of radius 4 cm which are inclined to each other at an angle of 45° . 4
8. Draw a line segment of length 7.6 cm and divide it in the ratio 3 :5 internally. Measure the two parts. Write the steps of construction. 4
9. Draw a triangle ABC with side AB=5 cm , $\angle B=60^\circ$ and BC =3 cm, Then construct a triangle whose sides are 1.5 times the corresponding sides of ΔABC . 4
10. Given two circles of radii 2 cm and 3 cm with their centres 7 cm apart. Draw the tangents from the centre of each circle to the other circle. 4