The City School

North Nazimabad Boys Campus

E-Worksheet

Teacher Name: Ambreen Badar Class: 8 Subject: Mathematics

Date: 15th April 2017

Topic:

FORMULAE: Following formulae for perimeters and areas of various figures:

(i) Perimeter of a rectangle = 2 (length + breadth)
(ii) Area of a rectangle = length × breadth
(iii) Perimeter of a square = 4 × side
(iv) Area of a square = $(\text{side})^2$
(v) Area of a parallelogram = base × corresponding altitude (height)
(vi) Area of a triangle = $\frac{1}{2}$ base × corresponding altitude (height)
(vii) Area of a rhombus = $\frac{1}{2}$ product of its diagonals
(viii) Area of a trapezium = $\frac{1}{2}$ (sum of the two parallel sides) × distance between them
(ix) circumference of a circle = 2 π × radius
(x) Area of a circle = π× $(\text{radius})^2$

(xi) Area of a semi-circle: $^1/_2 \times \pi \times r^2$
(xii) Area of a quarter circle: $^1/_4 \times \pi \times r^2$
(xiii) Perimeter of a semi-circle: $\pi \times r + 2 \times r$
(xiv) Perimeter of a quarter circle: $^1/_2 \times \pi \times r + 2 \times r$

Q1: Find the perimeter and area of the sector of a circle of radius 9 cm with central angle 35° .

Q2: Find the perimeter and area of the sector of a circle of radius 14 cm and central angle 30° .

Q3: Find the perimeter and area of the sector of a circle of radius 6 cm and length of the arc as 11 cm.

Q4: