# **B.E.S.T.** Group of Schools, Saudi Arabia

Class: 8 Subject: Mathematics Worksheet - 2

## Examination: PMT (2018) Block 4, 5, 6 & 7

### 1-mark questions:

- 1. A quadrilateral has ..... pairs of adjacent angles
- 2. If the sides of a quadrilateral are produced in order, the sum of the four exterior angles so formed is .....
- 3. One angle of a concave quadrilateral is  $\dots 180^{\circ}$ .
- 4. In a quadrilateral PQRS, PR and Qs are known as its .....
- 5. A quadrilateral has ..... angles and ..... diagonals.
- 6. In an isosceles trapezium, angles on the same base are .....
- 7. The diagonals of a square make an angle of ..... each other.
- 8. A hexagon has ..... diagonals
- 9. Angle sum of octagon is .....
- 10. Each interior angle of a regular decagon is .....

### 2-mark questions:

- 1. Find the measure of each exterior angle of a regular polygon of:
  - (i) 8 sides (ii) 12 sides
- 2. The angles of a quadrilateral are in the ratio 3: 5: 7: 9. Find the measure of the fourth angle.
- 3. ABCD is a parallelogram in which  $\angle A = 110^{\circ}$ . Find the measure of each of the angles  $\angle B$ ,  $\angle C$  and  $\angle D$ .
- 4. Two angles of a quadrilateral measures 55<sup>0</sup> each. The third angle is 140<sup>0</sup>. What is the measure of the fourth angle?
- 5. Two adjacent angles of a parallelogram are equal. What is the measure of each of these angles?
- 6. In the given figure, find the angle measure *x*.



#### 3-mark questions:

- 1. Construct a rhombus ABCD the lengths of whose diagonals are 6cm and 8 cm.
- 2. An isosceles trapezium has a perimeter of 200 cm. What would be the length of the non-parallel sides if the parallel sides have length as 20 cm and 10 cm.
- 3. The angles of a pentagon are  $x^0$ ,  $(x + 20)^0$ ,  $(x + 40)^0$ ,  $(x + 60)^0$ ,  $(x + 80)^0$ . Find each of these angles.
- 4. The perimeter of a parallelogram is 140 cm. If one of its sides is longer than the other by 10cm, find the length of each of its sides.
- 5. Two adjacent angles of a parallelogram are  $(3x 4)^0$  and  $(3x + 16)^0$ . Find the measure of each of these angles.

#### 4-mark questions:

- 1. Construct a parallelogram PQRS given PQ = 4.5 cm, QR = 3.5 cm and PR = 5.4 cm.
- 2. Using the angle sum property of polygon to find the missing angles:
  - (i)  $110^0, 90^0, 150^0, 102^0, 110^0, 170^0, x^0$
  - (ii) **110<sup>0</sup>**, **120<sup>0</sup>**, **95<sup>0</sup>**, **140<sup>0</sup>**, **x**<sup>0</sup>
- 3. Construct a quadrilateral ABCD in which AB = 4.2 cm, BC = 6 cm, CD = 5.2 cm,

DA = 5 cm and AC = 8 cm

4. ABCD is a parallelogram. Find x, y and z.

