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

Class: 8
Subject: Mathematics

Worksheet - 2

## Examination: PMT (2018) <br> Block 4, 5, 6 \& 7

## 1-mark questions:

1. A quadrilateral has $\qquad$ 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 $\qquad$
3. One angle of a concave quadrilateral is $180^{0}$.
4. In a quadrilateral PQRS, PR and Qs are known as its $\qquad$
5. A quadrilateral has $\qquad$ angles and $\qquad$ diagonals.
6. In an isosceles trapezium, angles on the same base are $\qquad$
7. The diagonals of a square make an angle of $\qquad$ each other.
8. A hexagon has $\qquad$ diagonals
9. Angle sum of octagon is $\qquad$
10. Each interior angle of a regular decagon is $\qquad$

## 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 $\angle \mathrm{A}=110^{\circ}$. Find the measure of each of the angles $\angle \mathrm{B}, \angle \mathrm{C}$ and $\angle \mathrm{D}$.
4. Two angles of a quadrilateral measures $55^{\circ}$ each. The third angle is $140^{\circ}$. 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 6 cm 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 $\boldsymbol{x}^{\mathbf{0}},(\boldsymbol{x}+\mathbf{2 0})^{\mathbf{0}},(\boldsymbol{x}+\mathbf{4 0})^{\mathbf{0}},(\boldsymbol{x}+\mathbf{6 0})^{\mathbf{0}},(\boldsymbol{x}+\mathbf{8 0})^{0}$. 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 10 cm , find the length of each of its sides.
5. Two adjacent angles of a parallelogram are $(\mathbf{3 x}-4)^{\mathbf{0}}$ and $(\mathbf{3 x}+\mathbf{1 6})^{\mathbf{0}}$. Find the measure of each of these angles.

## 4-mark questions:

1. Construct a parallelogram PQRS given $\mathrm{PQ}=4.5 \mathrm{~cm}, \mathrm{QR}=3.5 \mathrm{~cm}$ and $\mathrm{PR}=5.4 \mathrm{~cm}$.
2. Using the angle sum property of polygon to find the missing angles:
(i) $\mathbf{1 1 0}^{\mathbf{0}}, \mathbf{9 0}^{\mathbf{0}}, \mathbf{1 5 0}^{\mathbf{0}}, \mathbf{1 0 2}^{\mathbf{0}}, \mathbf{1 1 0}^{\mathbf{0}}, \mathbf{1 7 0}^{\mathbf{0}}, \boldsymbol{x}^{\mathbf{0}}$
(ii) $110^{0}, \mathbf{1 2 0}^{0}, \mathbf{9 5}^{0}, \mathbf{1 4 0}^{\mathbf{0}}, \boldsymbol{x}^{\mathbf{0}}$
3. Construct a quadrilateral ABCD in which $\mathrm{AB}=4.2 \mathrm{~cm}, \mathrm{BC}=6 \mathrm{~cm}, \mathrm{CD}=5.2 \mathrm{~cm}$, $\mathrm{DA}=5 \mathrm{~cm}$ and $\mathrm{AC}=8 \mathrm{~cm}$
4. ABCD is a parallelogram. Find $x, y$ and $z$.

