

INDIAN SCHOOL SOHAR  
FORMATIVE ASSESSMENT II (2015-16)  
MATHEMATICS

Date:  
Class: VIII

Marks: 20  
Time: 40 minutes

Note: Do the calculations in working column. Give necessary formulae and steps wherever required.

SECTION-A (Each question carries 1 mark)

For the questions 1 to 4 fill in the blanks by choosing the most suitable answers from the options given.

1. A ..... is a line segment connecting two non-consecutive vertices of a polygon.  
a) Side    b) Diagonal    c) Bisector    d) Median
2. The sum of the measures of the exterior angles of any convex polygon is .....  
a)  $180^\circ$     b)  $90^\circ$     c)  $270^\circ$     d)  $360^\circ$
3. A ..... has exactly two distinct consecutive pairs of sides of equal length.  
a) Parallelogram    b) Kite    c) Rectangle    d) Trapezium.

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SECTION-B (Each question carries 2 marks)

4. Three angles of a quadrilateral are  $45^\circ$ ,  $75^\circ$ , and  $105^\circ$ . Find the fourth angle.
5. What is the measure of one exterior angle of a regular octagon?

SECTION-C (Each question carries 3 marks)

6. Solve the equation:  $\frac{2x-5}{5x+2} = \frac{3}{22}$
7. Two diagonals of a rectangle are  $3x + 2$  cm and  $2x + 3$  cm. Find the measurement of each diagonal.
8. Construct a quadrilateral ABCD, with AB= 4.4 cm, BC= 4.2 cm, CD= 6.2 cm, DA = 3 cm, and BD = 6.4 cm.

SECTION-D (Each question carries 4 marks)

9. The ages in years of Ramesh and Rahim are in the ratio 5:7. If Ramesh were 9 years older and Rahim 9 years younger the age of Ramesh would have been twice the age of Rahim. Find their ages.

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SECTION-B (Each question carries 2 marks)

4. What is the measure of one exterior angle of a regular hexagon?
5. Three angles of a quadrilateral are  $55^\circ$ ,  $65^\circ$ , and  $115^\circ$ . Find the fourth angle.

SECTION-C

(Each question carries 3 marks)

6. Solve the equation:  $\frac{6x+7}{3x+2} = \frac{5}{3}$
7. Construct a quadrilateral ABCD, with AB= 4.4 cm, BC= 4.2 cm, CD= 6.2 cm, DA = 3 cm, and BD = 6.4 cm.
8. Two diagonals of a rectangle are  $3x + 2$  cm and  $2x + 3$  cm. Find the measurement of each diagonal.

SECTION-D

(Each question carries 4 marks)

9. The ages in years of Ramesh and Rahim are in the ratio 5:7. If Ramesh were 12 years older and Rahim 12 years younger, then the age of Ramesh would have been twice the age of Rahim. Find their ages.

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