

## INDIAN SCHOOL AL WADI AL KABIR

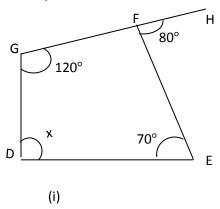
## **DEPARTMENT OF MATHEMATICS**

SUMMER HOLIDAY HOMEWORK 2017-18

**CLASS-VIII** 

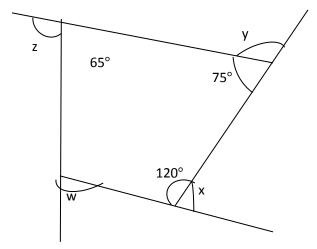
Submission date: 7<sup>th</sup> Aug 2017

Q.1) Find the value of x:



120 125 80° (ii)

Q-2. ) Find w, x, y, z using property



- 135<sup>0</sup>, 45<sup>0</sup> PQRS is a parallelogram. One pair of its adjacent angles are in the ratio 3:1. 3. Find all 4 angles of it.
- 4. If three angles of a quadrilateral are 85°, 65° and 50°. Find the fourth angle. 160°
- If one angle of a parallelogram is 90°, what are the measures of the other three 5. angles? What other name will you give to this parallelogram?

- ABCD is a rhombus, whose diagonal AC = (5x + 4) cm, is double the diagonal BD = 7 cm. Find the value of x.
- 7. PQRS is a trapezium with PQ // RS. Use property to find all the four angles, if  $\bot P = (3x 20)^0$ ,  $\bot Q = y^0$ ,  $\bot R = 65^0$  and  $\bot S = (2x 10)^0$
- 8. Two adjacent angles of a parallelogram are in the ratio 2:7. Find the measure of each angle.
- 9. If possible, how many sides does a regular polygon have with each of it's exterior angle as 120°? Give reason for your answer.
- 10. Name a regular polygon whose each exterior angle measures 36°.
- 11. Draw a labeled diagram of each of the special quadrilaterals you have learnt and write down at least three properties of each of them.
- 12. Draw any four polygons, in a tabular form and represent their sides, angle sums and number of diagonals. [ Hint : use the formula Angle sum =  $(n-2) \times 180^0$ , number of diagonals =  $\frac{n (n-3)}{2}$
- 13. Insert 5 rational numbers between  $\frac{-3}{5}$  and  $\frac{-7}{10}$
- 14. Draw a number line to represent the given rational numbers on it.  $\frac{-6}{7}$ ,  $\frac{-3}{7}$ , 0, 1,  $\frac{5}{7}$
- 15. Use property to solve:  $\frac{7}{3} \times \frac{-2}{5} + \frac{7}{3} \times \frac{9}{5} \frac{5}{9}$
- 16. Find the value of (i)  $\left[\frac{-3}{7}\right]^{-2}$  (ii) (3)-4
- 17. Find the multiplicative inverse of  $5^{-2}$  and  $(\frac{3}{11})^{-5}$
- 19. Write 0, 000 000 000 079 in standard form.
- 20. Write  $7.89 \times 10^{-5}$  in usual form
- 21. Expand using exponents: 137. 1075
- 22. Construct a quadrilateral ABCD with AB= 3cm , BC= 4cm , CD= 5cm, DA= 5cm, AC= 5cm
- 23. Construct a quadrilateral DEFG with DE = 4 cm, EF = DF=7cm, DG = EG = 5cm
- Construct a quadrilateral PQRS with PQ = 5cm, angle Q =  $60^{\circ}$ , QR = 6.5 cm, Angle R=  $90^{\circ}$ , RS= 4 cm
- Construct a (i) square with each side = 5.6 cm (ii) A rectangle ABCD, with AB=7.5cm, BC= 3.5cm (iii) A rhombus ABCD, with AC=8cm, BD = 5cm