# INDIAN SCHOOL AL WADI AL KABIR 

## DEPARTMENT OF MATHEMATICS


(ii)
(i)

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

3. PQRS is a parallelogram. One pair of its adjacent angles are in the ratio 3:1.
4. If three angles of a quadrilateral are $85^{\circ}, 65^{\circ}$ and $50^{\circ}$. Find the fourth angle.
5. If one angle of a parallelogram is $90^{\circ}$, what are the measures of the other three angles? What other name will you give to this parallelogram?
6. $A B C D$ is a rhombus, whose diagonal $A C=(5 x+4) \mathrm{cm}$, is double the diagonal $B D=7 \mathrm{~cm}$. Find the value of $x$.
7. $P Q R S$ is a trapezium with $P Q / / R S$. Use property to find all the four angles, if $\left\llcorner P=(3 x-20)^{0}, L Q=y^{0}, L R=65^{0}\right.$ and $L S=(2 x-10)^{0}$
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 $120^{\circ}$ ? Give reason for your answer.
10. Name a regular polygon whose each exterior angle measures $36^{\circ}$.
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 $=(n-2) \times 180^{\circ}$, 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) $\left[\frac{-3}{7}\right]^{-2} \quad$ (ii) $(3)^{-4}$
17. Find the multiplicative inverse of $5^{-2}$ and $\left(\frac{3}{11}\right)^{-5}$
19. Write 0.000000000079 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 $\mathrm{AB}=3 \mathrm{~cm}, \mathrm{BC}=4 \mathrm{~cm}, \mathrm{CD}=5 \mathrm{~cm}, \mathrm{DA}=$ $5 \mathrm{~cm}, \mathrm{AC}=5 \mathrm{~cm}$
23. Construct a quadrilateral DEFG with $\mathrm{DE}=4 \mathrm{~cm}, \mathrm{EF}=\mathrm{DF}=7 \mathrm{~cm}, \mathrm{DG}=\mathrm{EG}=$ 5cm
24. Construct a quadrilateral $P Q R S$ with $P Q=5 \mathrm{~cm}$, angle $Q=60^{\circ}, Q R=6.5 \mathrm{~cm}$, Angle $\mathrm{R}=90^{\circ}$, $\mathrm{RS}=4 \mathrm{~cm}$
25. Construct a (i) square with each side $=5.6 \mathrm{~cm}$ (ii) $A$ rectangle $A B C D$, with $A B=7.5 \mathrm{~cm}, B C=3.5 \mathrm{~cm}$ (iii) $A$ rhombus $A B C D$, with $A C=8 \mathrm{~cm}, B D=5 \mathrm{~cm}$

