| + + x$\qquad$ Department of 0 Mathematics (a) © $\qquad$ D |  |  | INDIAN SCHOOL AL WADI AL KABIR <br> Class VIII, Mathematics <br> TOPIC- Summer Holiday Homework (2022-23) |  |  |  |  |  |
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| MULTIPLE-CHOICE QUESTIONS |  |  |  |  |  |  |  |  |
| Q. 1 | The perimeter of a rectangle is 260 cm . if one adjacent side exceeds the other by 10 cm , what are the sides of a rectangle? |  |  |  |  |  |  |  |
|  | A | $60 \mathrm{~cm}, 70 \mathrm{~cm}$ | B | $45 \mathrm{~cm}, 50 \mathrm{~cm}$ | C | $50 \mathrm{~cm}, 60 \mathrm{~cm}$ | D | $65 \mathrm{~cm}, 55 \mathrm{~cm}$ |
| Q. 2 | $A B C D$ is a rectangle. Its diagonals meet at 0 . Find the value of $x$ if $O A=2 x+4$ and $O D=3 x+1$. |  |  |  |  |  |  |  |
|  | A | 2 | B | 3 | C | -2 | D | -3 |
| Q. 3 | Each interior angle of a regular polygon is $144^{\circ}$. How many sides does the polygon have? |  |  |  |  |  |  |  |
|  | A | 8 | B | 12 | C | 9 | D | 10 |
| Q. 4 | The measures of two adjacent angles of a parallelogram are in the ratio 5:7. Find the measure of each of the angles of the parallelogram? |  |  |  |  |  |  |  |
|  | A | $110^{\circ}, 70^{\circ}$ | B | $75^{\circ}, 105^{\circ}$ | C | $106^{\circ}, 74^{\circ}$ | D | $15^{\circ}, 165^{\circ}$ |
| Q. 5 |  |  |  |  |  |  |  |  |
|  | A | $70^{\circ}$ | B | $50^{\circ}$ | C | $60^{\circ}$ | D | $120^{\circ}$ |
| FILL IN THE BLANKS |  |  |  |  |  |  |  |  |
| Q. 6 | The number of diagonals in a pentagon are___ |  |  |  |  |  |  |  |
| Q. 7 | Quadrilaterals have two pairs of equal adjacent sides and equal diagonals intersect at $90^{\circ}$ $\qquad$ |  |  |  |  |  |  |  |
| Q. 8 | The measure of each exterior angle of a regular polygon of 8 sides |  |  |  |  |  |  |  |
| Q. 9 | A polygon that is both equiangular and equilateral is called a __ polygon. |  |  |  |  |  |  |  |
| Q. 10 | The diagonals of a rhombus are ___ bisectors of one another. |  |  |  |  |  |  |  |

## LONG ANSWER TYPE QUESTIONS

Q. 11 Construct a quadrilateral NEWS in which $N E=7 \mathrm{~cm}, \mathrm{EW}=6 \mathrm{~cm}, \angle \mathrm{~N}=60^{\circ}, \angle \mathrm{E}=120^{\circ}$ and $\angle S=85^{\circ}$.
Q. $12 \begin{aligned} & \text { In the given parallelogram, find the values of } x, y, z, \text { and } w \\ & \text { and give reasons. }\end{aligned}$

Q. 13 Find the value of $x, y$ and $z$, if $A B C D$ is a parallelogram.

Q. 14 Construct a Quadrilateral $A B C D$ where $A B=5 \mathrm{~cm}, B C=7 \mathrm{~cm}, D C=5.5 \mathrm{~cm}, A D=6.5 \mathrm{~cm}$ and $A C=8.5 \mathrm{~cm}$.
Q. 15 In the figure, MATH is a SQUARE then find the following
(i) $\mathrm{MA}=8 \mathrm{~cm}$, then $\mathrm{AT}=$ $\qquad$
(ii) $\angle \mathrm{HST}=$ $\qquad$
(iii) $\angle$ MAT $=$ $\qquad$
(iv) $\angle \mathrm{HMT}=$ $\qquad$
(v) If $\mathrm{HS}=2 \mathrm{~cm}$, then $\mathrm{HA}=$ $\qquad$ and MT

$\mathcal{H} \mathcal{A P P} \mathcal{H} O \mathcal{L} \mathcal{D} \mathcal{A} Y S$ !!!!........

| $\begin{aligned} & \text { n } \\ & \frac{10}{3} \\ & \vdots \\ & \frac{1}{4} \end{aligned}$ | 1 | A | 2 | B | 3 | D | 4 | B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | A | 6 | Five | 7 | Square | 8 | $45^{\circ}$ |
|  | 9 | Regular | 10 | perpendicular | 12 | $\begin{gathered} \mathrm{Y}=80 \\ \mathrm{X}=100 \\ \mathrm{Z}=80 \\ \mathrm{~W}=100 \end{gathered}$ | 13 | $\begin{aligned} & Y=95 \\ & X=25 \\ & Z=60 \end{aligned}$ |

