|  | - |  | INDIAN SCHOOL AL WADI AL KABIR <br> Class VII, Mathematics TRIANGLES \& ITS PROPERTIES WORKSHEET- (MCQ) |  |  |  |  |  |
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| Multiple Choice Questions |  |  |  |  |  |  |  |  |
| Q1. | The sum of any two sides of a possible triangle is: |  |  |  |  |  |  |  |
|  | A | Less than the third side | B | Equal to third side | C | Greater than the third side | D | Half of the third side |
| Q2. | The sum of an exterior angle of a triangle and its adjacent angle is always equal to: |  |  |  |  |  |  |  |
|  | A | $90^{\circ}$ | B | $180^{\circ}$ | $\mathbf{C}$ | $360^{\circ}$ | D | $270^{\circ}$ |
| Q3. | In a right- angled triangle, the angles other than the right angle are: |  |  |  |  |  |  |  |
|  | A | Obtuse | B | Right | C | Acute | D | Straight |
| Q4. | One of the acute angles of a right-angled triangle is $22.5^{\circ}$. Which is the other angle? |  |  |  |  |  |  |  |
|  | A | $65.7^{\circ}$ | B | $62.5^{\circ}$ | C | $72.5^{\circ}$ | D | $67.5^{\circ}$ |
| Q5. | Which two sides are equal in the given triangle. |  |  |  |  |  |  |  |
|  | A | $A B, B C$ | B | BC, CA | C | CA, AB | D | No sides are equal |
| Q6. | The hypotenuse of a right triangle is 17 cm long. If one of the remaining two sides is 8 cm in length, then the length of the other side is: |  |  |  |  |  |  |  |
|  | A | 15 cm | B | 13 cm | C | 12 cm | D | 9 cm |
| Q7. | Which of the following can be the lengths of sides of a triangle? |  |  |  |  |  |  |  |
|  | A | $3 \mathrm{~cm}, 4 \mathrm{~cm}, 7 \mathrm{~cm}$ | B | $2 \mathrm{~cm}, 3 \mathrm{~cm}, 7 \mathrm{~cm}$ | C | $3 \mathrm{~cm}, 4 \mathrm{~cm}, 5 \mathrm{~cm}$ | D | $3 \mathrm{~cm}, 3 \mathrm{~cm}, 7 \mathrm{~cm}$ |
| Q8. | The exterior angle of a triangle is of measure $150^{\circ}$ and one of its interior opposite angles is of measure $85^{\circ}$. Find the measure of another interior opposite angle. |  |  |  |  |  |  |  |
|  | A | $55^{\circ}$ | B | $45^{\circ}$ | C | $35^{\circ}$ | D | $65^{\circ}$ |
| Q9. | Which of the following cannot be the angles of a triangle? |  |  |  |  |  |  |  |
|  | A | $53^{\circ}, 57^{\circ}, 70^{\circ}$ | B | $65^{\circ}, 45^{\circ}, 70^{\circ}$ | C | $75^{\circ}, 20^{\circ}, 75^{\circ}$ | D | $60^{\circ}, 40^{\circ}, 80^{\circ}$ |


| Q10. | Find the angle x in the given figure. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | $70^{\circ}$ | B | $55^{\circ}$ | C | $20^{\circ}$ | D | $35^{\circ}$ |
| FILL IN THE BLANKS |  |  |  |  |  |  |  |  |
| Q11. | In a triangle, if two interior angles are $65^{\circ}$ and $70^{\circ}$, then the measure of exterior angle opposite to it is $\qquad$ . |  |  |  |  |  |  |  |
| Q12. | The base angle of an isosceles triangle is $65^{\circ}$, the measure of the vertical angle is ___. |  |  |  |  |  |  |  |
| Q13. | The triangle in which two altitudes of a triangle are two of its sides is ._. |  |  |  |  |  |  |  |
| Q14. | $\qquad$ connects a vertex of a triangle to the midpoint of its opposite side. |  |  |  |  |  |  |  |
| Q15. | In a right-angled triangle-shaped park, an angle measure $35^{\circ}$. What will be the measure of the third angle? |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Q16. | Find the length of the diagonal OM. |  |  |  |  |  |  |  |
|  | A | 4 cm | B | 5 cm | C | 8 cm | D | 16 cm |
| Q17. | What is the perimeter of $\triangle \mathrm{LMO}$. |  |  |  |  |  |  |  |
|  | A | 21 cm | B | 32 cm | C | 20 cm | D | 24 cm |
| Q18. | If $\angle \mathrm{MNO}=70^{\circ}$, find the measure of $\angle \mathrm{MON}$. |  |  |  |  |  |  |  |
|  | A | $30^{\circ}$ | B | $55^{\circ}$ | C | $60^{\circ}$ | D | $90^{\circ}$ |


| Q19. | Which of the following is $\operatorname{NOT}$ true from the figure? |  |  |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | $\mathrm{LO}^{2}-\mathrm{LM}^{2}=\mathrm{MO}^{2}$ | B | $\mathrm{LO}^{2}=\mathrm{LM}^{2}-\mathrm{MO}^{2}$ | $\mathbf{C}$ | $\mathrm{LO}^{2}=\mathrm{LM}^{2}+\mathrm{MO}^{2}$ | D | $\mathrm{LO}^{2}-\mathrm{OM}^{2}=\mathrm{LM}^{2}$ |
| Q20. | If $\angle \mathrm{LL}=50^{\circ}$, find $\angle \mathrm{MOL}$. |  |  |  |  |  |  |  |
|  | A | $45^{\circ}$ | B | $70^{\circ}$ | C | $40^{\circ}$ | D | $30^{\circ}$ |

ANSWERS

| $\mathbf{1 .}$ | Greater than the <br> third side | $\mathbf{2 .}$ | B) $180^{\circ}$ | 3. | C)Acute | 4. | D) $67.5^{\circ}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5. | B) $\mathrm{BC}, \mathrm{CA}$ | $\mathbf{6 .}$ | A) 15 cm | 7. | C) $3 \mathrm{~cm}, 4 \mathrm{~cm}, 5 \mathrm{~cm}$ | 8. | D) $65^{\circ}$ |
| 9. | C) $75^{\circ}, 20^{\circ}, 75^{\circ}$ | 10. | B) $55^{\circ}$ | 11. | $135^{\circ}$ | 12. | $50^{\circ}$ |
| 13. | Right angled <br> triangle | 14. | Median | 15. | $55^{\circ}$ | 16. | C) 8 cm |
| 17. | D) 24 cm | 18. | B) $55^{\circ}$ | 19. | B) $\mathrm{LO}^{2}=\mathrm{LM}^{2}-\mathrm{MO}^{2}$ | 20. | C) $40^{\circ}$ |

