

## Similar Figures

| Sr | Questions  | Answers Choice   |
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| 1  | If radii of two circles are in the ratio 2:3 then their surface areas are in the ratio.  | A. 2:3<br>B. 4:9<br>C. 8:18<br>D. 8:27                           |
| 2  | The interior and exterior angles of regular hexagon are in the ratio.  | A. 1:2<br>B. 2:1<br>C. 1:6<br>D. 2:3                             |
| 3  | The repeating pattern of regular shapes is called.   | A. Tessellation<br>B. Oscillation<br>C. Rotation<br>D. Citation  |
| 4  | If two Spheres have volumes in th ratio 8:27 then their corresponding lengths are in the ratio.  | A. 2:3<br>B. 4:9<br>C. 8:18<br>D. 8:27                           |
| 5  | A regular polygon has an interior angle of $165^\circ$ . How many sides does it have?  | A. 15<br>B. 16<br>C. 20<br>D. 24                                 |
| 6  | The each interior angle of which regular polygon is $108^\circ$  | A. Square<br>B. Pentagon<br>C. Hexagon<br>D. Heptagon            |
| 7  | The total number of diagonals in a polygon i with 9 sides is   | A. 18<br>B. 21<br>C. 25<br>D. 27                                 |
| 8  | If the sum of interior angles of a rgular polygon is $1440^\circ$ then number of sides are   | A. 8<br>B. 10<br>C. 12<br>D. 14                                  |
| 9  | The exterior angle of regular pentagon is  | A. $40^\circ$<br>B. $45^\circ$<br>C. $60^\circ$<br>D. $72^\circ$ |
| 10 | How many equilateral triangles are in a regular hexagon.   | A. 4<br>B. 5<br>C. 6<br>D. 8                                     |
| 11 | The parallelogram has an area of 64 cm <sup>2</sup> and a similar parallelogram has an area of 144 cm <sup>2</sup> . If a side of the smaller parallelogram is 8 cm, what is the corresponding side of the larger parallelogram? | A. 10 cm<br>B. 12 cm<br>C. 18 cm<br>D. 16 cm                     |
| 12 | A regular polygon has an exterior angle of $30^\circ$ . How many diagonals does the polygon have?  | A. 54<br>B. 90<br>C. 72<br>D. 108                                |
| 13 | The sum of interior angles of which regular polygon is $1080^\circ$  | A. Pentagon<br>B. Hexagon<br>C. Heptagon<br>D. Octagon           |
| 14 | If the volume of two similar solids is 125 cm <sup>3</sup> nd 27 cm <sup>3</sup> , the ratio of their correspodng heights is.  | A. 3:5<br>B. 5:3<br>C. 25:9<br>D. 9:25                           |
| 15 | The each interior and exterior angle of which regular polygon is equal   | A. Square<br>B. Pentagon<br>C. Hexagon<br>D. Heptagon            |

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| 16 | The ratio of corresponding sides of similar figures is called  | <p>A. Common factor</p> <p>B. Scale factor</p> <p>C. Grading factor</p> <p>D. Proportion</p>   |
| 17 | Two spheres are similar, and their radii are in the ratio 4:5. If the surface area of the larger sphere is 500 | <p>A. <br/></p> <p>B. <br/></p> <p>C. <br/></p> <p>D. <br/></p>  |
| 18 | Which of the followign is scale factor of area.  | <p>A. K</p> <p>B. <math>K^2</math></p> <p>C. 2K</p> <p>D. <math>K^3</math></p>   |
| 19 | If two polygons are similar, then  | <p>A. Their corresponding angles are equal</p> <p>B. Their areas are equal</p> <p>C. Their volumes are equal</p> <p>D. Their corresponding sides are equal</p> |
| 20 | In similar figures corresponding angles are congruent and corresponding sides are                              | <p>A. Congruent</p> <p>B. Parallel</p> <p>C. Perpendicular</p> <p>D. Proportional</p>  |