



MATHS

BOOKS - GURUKUL BOOKS & PACKAGING MATHS (HINGLISH)

GEOMETRY MARCH 2019

Questions

1. यदि $\Delta ABC \sim \Delta PQR$ तथा $\angle A = 60^\circ$, तब $\angle P = ?$

A. 40°

B. 60°

C. 80°

D. 100°

Answer: B



Watch Video Solution

2. एक समकोण $\triangle ABC$, में यदि $\angle B = 90^\circ$, $AB = 6$,
 $BC=8$, तब $AC=?$.

A. 9

B. 10

C. 11

D. 12

Answer: B



Watch Video Solution

3. Write the length of largest chord of a circle with radius 3.2 cm.



 [Watch Video Solution](#)

4. Find the value of $\sin 30^\circ + \cos 60^\circ$

 [Watch Video Solution](#)

5. Find the area of a circle of radius 7 cm.

 [Watch Video Solution](#)

6. Draw seg AB of length 5.7 cm and bisect it.



 [Watch Video Solution](#)

7. In right-angled triangle PQR, if $\angle P = 60^\circ$, $\angle R = 30^\circ$ and $PR = 12$, then find the values of PQ and QR.



[Watch Video Solution](#)

8. In a right circular cone, if perpendicular height is 12 cm and radius is 5 cm, then find its slant height.



[Watch Video Solution](#)

9. $\triangle ABC$ and $\triangle DEF$ are equilateral triangles. If $A(\triangle ABC) : A(\triangle DEF) = 1 : 2$ and $AB=4$, then what is the length of DE ?

A. $2\sqrt{2}$

B. 4

C. 8

D. $4\sqrt{2}$

Answer:



Watch Video Solution

10. Out of the following which is a Pythagorean triplet?

A. (5,12,14)

B. (3,4,2)

C. (8,15,17)

D. (5,5,2)

Answer:



Watch Video Solution

11. $\angle ACB$ is inscribed in arc ACB of a circle with centre O . If $\angle ACB = 65^\circ$, find m (arc ACB) .

A. 130°

B. 295°

C. 230°

D. 65°

Answer:



Watch Video Solution

12. $1 + \tan^2 \theta = ?$

A. $\sin^2 \theta$

B. $\sec^2 \theta$

C. $\operatorname{cosec}^2 \theta$

D. $\cot^2 \theta$

Answer:



Watch Video Solution

13. Find slope of a line passing through the points A(3, 1) and B(5, 3).



Watch Video Solution

14. Find the surface area of a sphere of radius 3.5 cm.



Watch Video Solution

15. How many solid cylinders of radius 6 cm and height 12 cm can be made by melting a

solid sphere of radius 18 cm?

Activity: Radius of the sphere, $r = 18$ cm

For cylinder, radius $R = 6$ cm, height $H = 12$ cm

∴ Number of cylinders can be made

$$= \frac{\text{Volume of the sphere}}{\square}$$

$$= \frac{\frac{4}{3}\pi r^3}{\square}$$

$$= \frac{\frac{4}{3} \times 18 \times 18 \times 18}{\square}$$

$$= \square$$



Watch Video Solution

16. Verify whether the following points are collinear or not:

A (1, -3), B (2, -5), C (-4, 7).



Watch Video Solution

17. If $\sec \theta = \frac{25}{7}$, then find the value of $\tan \theta$



Watch Video Solution

18. In $\triangle PQR$, seg PM is a median, $PM=9$ and $PQ^2 + PR^2 = 290$. Find the length of QR.



Watch Video Solution

19. When an observer at a distance of 12 m from a tree looks at the top of the tree, the angle of elevation is 60° . What is the height of the tree?



Watch Video Solution

20. Show that the points $(2,0)$, $(-2,0)$ and $(0,2)$ are the vertices of a triangle. Also state with reason the type of the triangle .



Watch Video Solution