

## Chapter 15. Trigonometry

1) Trigonometry is an important branch of \_\_\_\_\_.

- A) Physics
- B) Chemistry
- C) Biology
- D) Mathematics

Answer: D

2) \_\_\_\_\_ plays significant role in the field of navigation, surveying, electronics, electrical engineering and many other branched of physical sciences.

- A) Biology
- B) Trigonometry
- C) Anatomy
- D) Geology

Answer: B

3) The \_\_\_\_\_ angles and three sides of a triangle are called elements of a triangle.

- A) two
- B) three
- C) four
- D) none of these

Answer: B

4)  $\sin\theta =$

- A)  $\frac{P}{B}$
- B)  $\frac{P}{H}$
- C) Both A and B
- D) None of these

Answer: B

5)  $\cos\theta =$

- A)  $\frac{P}{H}$
- B)  $\frac{B}{H}$
- C)  $\frac{P}{B}$
- D) None of these

Answer: B

6)  $\tan\theta =$

- A)  $\frac{P}{B}$
- B)  $\frac{P}{H}$
- C)  $\frac{H}{B}$
- D) None of these

Answer: A

7)  $\sin^2 60^\circ + \cos^2 60^\circ =$

- A) 2
- B) 3
- C) 1
- D) 0

Answer: C

8)  $1 + \tan^2\theta =$

- A)  $\sec^2\theta$
- B)  $\tan^2\theta$
- C)  $\cos^2\theta$
- D) None of these

Answer: A

9)  $1 + \cot^2\theta =$

- A)  $\operatorname{cosec}^2\theta$
- B)  $\sin^2\theta$
- C)  $\cos^2\theta$
- D)  $\tan^2\theta$

Answer: A

10)  $\tan 20^\circ = \cot (\quad)$

- A)  $20^\circ$
- B)  $30^\circ$
- C)  $70^\circ$
- D)  $80^\circ$

Answer: C

11)  $\sin 30^\circ = \cos (\quad)$

- A)  $50^\circ$
- A)  $60^\circ$
- B)  $30^\circ$
- C)  $40^\circ$

Answer: B

12)  $\tan\theta = \cot (\quad)$

- A)  $90^\circ + \theta$
- B)  $90^\circ - \theta$
- C)  $90^\circ$
- D)  $20^\circ + \theta$

Answer: B

13)  $\cot 60^\circ =$

- A)  $\sqrt{3}$
- B)  $\frac{1}{\sqrt{3}}$
- C) 1
- D) None of these

Answer: B

14)  $\sin 60^\circ =$

- A)  $\frac{1}{2}$
- B)  $\frac{\sqrt{3}}{2}$

- C)  $\frac{1}{\sqrt{2}}$
- D) 0

Answer: B

15)  $\sin\theta \cdot \sec\theta =$

- A)  $\cot\theta$
- B)  $\cos\theta$
- C)  $\tan\theta$
- D)  $\operatorname{cosec}\theta$

Answer: C

16)  $\cot\theta$  is the reciprocal of \_\_\_\_\_.

- A)  $\sin\theta$
- B)  $\tan\theta$
- C)  $\sec\theta$
- D)  $\operatorname{cosec}\theta$

Answer: B

17)  $\sqrt{1 - \sin^2\theta} =$

- A)  $\cos^2\theta$
- B)  $\sin\theta$
- C)  $\sec\theta$
- D)  $\cos\theta$

Answer: D