BIRLA DIVYA JYOTI
Subject: Mathematics
Ch: Introduction To Trigonometry
Worksheet: 1 Of 1

Class and Sec: **X/___**

Name: **Roll No:**

1. In Δ ABC, right-angled at B, AB = 24 cm, BC = 7 cm. The value of tan C is:

(a)12/7

(b)24/7

(c)20/7

(d)7/24

2. **If cos X=a/b, then sin X is equal to:**

(a)b^2-a^2/b

(b)b-a/b

(c)√(b^2-a^2)/b

(d)√(b-a)/b

3. **(Sin 30°+cos 60°)-(sin 60° + cos 30°) is equal to:**

(a)0

(b)1+2√3

(c)1-√3

(d)1+√3

4. **2tan 30°/1+$tan^2$30° =**

(a)Sin 60°

(b)Cos 60°

(c)Tan 60°

(d)Sin 30°

5. In right triangle ABC, right angled at C, if tan A = 1, then the value of 2 sin A cos A is

(a) 0

(b) 1

(c) – 1

(d) 2

6. Given that sin A=1/2 and cos B=1/√2 then the value of (A + B) is:

(a) 30°

(b) 45°

(c) 75°

(d) 15°

7. The study of relationships between the sides and angles of a triangle is —–

A. Statistics
B. Trigonometry
C. Geometry

8. If tan A = 4/3 and sin A = 4/5 then cos A = ————–

A. 4/5
B. 3/5
C. ¾

9. Which of the following is true?

A. sec A = 12/5 for some value of angle A.
B. The value of tan A is always less than one.
C. cot A is the product of cot and A.

10. The values of the trigonometric ratios of an angle ———— with the lengths of the sides of the triangle, if the angle remains the same.

A. vary
B. Do not vary
C. None of these

11. The value of sec A or cosec A is always ————-

A. Less than or equal to one
B. Greater than or equal to one
C. Equal to one

12. If x tan 45° sin 30° = cos 30° tan 30°, then x is equal to
(a) √3
(b) 1/2
(c) 1/√2
(d) 1

13. If $\sin\theta + \sin^2\theta = 1$, then $\cos^2\theta + \cos^4\theta$ =?
(a) -1
(b) 0
(c) 1
(d) 2