

## Introduction to Trigonometry : Worksheet -2

1. In  $\triangle ABC$ , right-angled at B, AB = 24 cm, BC = 7 cm.

Determine:

- (i)  $\sin A, \cos A$       (ii)  $\sin C, \cos C$

2. If  $\sin A = \frac{3}{4}$  calculate  $\cos A$  and  $\tan A$ .

3. Given  $15 \cot A = 8$ , find  $\sin A$  and  $\sec A$ .

4. Given  $\sec \theta = 13/12$  calculate all other trigonometric ratios.



5. If  $\angle A$  and  $\angle B$  are acute angles such that  $\cos A = \cos B$ , then show that  $\angle A = \angle B$ .

6. If  $\cot \theta = 7/8$ , evaluate :

(i) 
$$\frac{(1+\sin\theta)(1-\sin\theta)}{(1+\cos\theta)(1-\cos\theta)}$$

(ii)  $\cot^2\theta$

