

2 Prove the following.  $\sec\theta (1 - \sin\theta) (\sec\theta + \tan\theta) = 1$ 

## Q.5 Answer the following

1 Two building are in front of each other on either side of a road of width 10 meters. From the top of the first building, which is of 30 meters of height the angle of elevation of the top second is 45° what is the height of the building ?

$$\frac{2}{\cos \cos x - 1} = \frac{1}{\sec x + \tan x}$$

Q.6 Answer the following

$$\frac{1+\sin A}{\cos A} = \frac{1+\sin A+\cos A}{1+\cos A-\sin A}$$

<sup>2</sup> Prove the following  $\frac{\sin \theta - \cos \theta + 1}{\sin \theta + \cos \theta - 1} = \frac{1}{\sec \theta - \tan \theta}$ 

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