Year 9 Trigonometry Worksheet

1. If $\sin 30^0 = 1/2$, find the $\sin 210^0$.

2. Evaluate $\sin^2(90º - A) + \cos^2(90º - A) + \sec^2(90º - A) - \tan^2(90º - A)$

3. If $2 \sin (A + B) = 3$, and $\sqrt{2}\cos B = 1$, find A and B.

4. Evaluate $\text{cosec}^2 45° \cot^2 30° + \sin^2 60° \sec^2 30°$

5. Evaluate without using trigonometric tables.

$$\tan 7°.\tan 23°.\tan 60°.\tan 67°.\tan 83° + \frac{\cot 54°}{\tan 36°} + \sin 20°.\sec 70° - 2$$

7. If $\sin\theta = \frac{1}{3}$, then find the value of $(2\cot^2\vartheta + 2)$.

8. Without using trigonometrical tables, evaluate:

$$\frac{\cos 58°}{\sin 32°} + \frac{\sin 22°}{\cos 68°} - \frac{\cos 38° \text{cosec} 52°}{\tan 18° \cdot \tan 35° \tan 60° \tan 72° \tan 55°}$$

9. If $\cos A = \frac{7}{25}$, find the value of tan A + cot A.

10. Evaluate $\cos 105^0$