Introduction to Trigonometry : Worksheet -5

1. Evaluate :

(i) $\frac{\text{Sin}18^0}{\text{Cos}72^0}$

(ii) $\frac{\text{Tan}26^0}{\text{Cot}64^0}$

(iii) cos 48° – sin 42°

(iv) cosec 31° – sec 59°

2. Show that :

(i) tan 48° tan 23° tan 42° tan 67°

(ii) cos 38° cos 52° – sin 38° sin 52°

3. If tan 2A = cot (A – 18°), where 2A is an acute angle, find the value of A.

4. If tan A = cot B, prove that A + B = 90°.

5. If sec 4A = cosec (A – 20°), where 4A is an acute angle, find the value of A.

6. If A, B and C are interior angles of a triangle ABC, then show that $\text{Sin}\left(\frac{B+C}{2}\right) = \text{Cos}\frac{A}{2}$