



1. $\sec 45^\circ \cot 30^\circ \operatorname{cosec} 30^\circ + \operatorname{cosec} 60^\circ \cot 60^\circ \sec 30^\circ =$

- (i) $(2\sqrt{6} + \frac{4}{9}\sqrt{3})$ (ii) $(2\sqrt{6} + \frac{4}{3})$ (iii) $(2\sqrt{6} + \frac{4}{9}\sqrt{3})$ (iv) $(2\sqrt{8} + \frac{4}{9}\sqrt{3})$ (v) $(2\sqrt{3} + \frac{4}{9}\sqrt{3})$

2. $\frac{\cos 30^\circ \tan 0^\circ + \tan 60^\circ \cos 90^\circ}{\operatorname{cosec} 45^\circ \operatorname{cosec} 60^\circ - \sec 60^\circ \cos 0^\circ} =$

- (i) 0 (ii) (-3) (iii) 1 (iv) 3 (v) (-1)

3. $\frac{\sin 23^\circ}{\cos 67^\circ} =$

- (i) $\tan 23^\circ$ (ii) 1 (iii) $\tan 67^\circ$ (iv) 0 (v) -1

4. $\frac{\cos 81^\circ}{\sin 9^\circ} =$

- (i) $\tan 81^\circ$ (ii) 0 (iii) -1 (iv) 1 (v) $\tan 9^\circ$

5. $\frac{\tan 56^\circ}{\cot 34^\circ} =$

- (i) 1 (ii) -1 (iii) 0 (iv) $\tan 34^\circ$ (v) $\tan 56^\circ$

6. $\frac{\cot 37^\circ}{\tan 53^\circ} =$

- (i) -1 (ii) 1 (iii) $\tan 37^\circ$ (iv) $\tan 53^\circ$ (v) 0

7. $\frac{\sec 77^\circ}{\operatorname{cosec} 13^\circ} =$

- (i) $\tan 13^\circ$ (ii) 1 (iii) -1 (iv) $\tan 77^\circ$ (v) 0

8. $\frac{\operatorname{cosec} 27^\circ}{\sec 63^\circ} =$

- (i) 1 (ii) -1 (iii) $\tan 27^\circ$ (iv) 0 (v) $\tan 63^\circ$

9. $\frac{\sin 43^\circ \cos 37^\circ}{\cos 47^\circ \sin 53^\circ} =$

- (i) 1 (ii) $\tan 37^\circ$ (iii) $\tan 43^\circ$ (iv) -1 (v) 0

10. $\frac{\cos 29^\circ \sin 42^\circ}{\sin 61^\circ \cos 48^\circ} =$

- (i) $\tan 42^\circ$ (ii) 0 (iii) -1 (iv) 1 (v) $\tan 29^\circ$

11. $\frac{\tan 57^\circ \cot 48^\circ}{\cot 33^\circ \tan 42^\circ} =$

- (i) 1 (ii) 0 (iii) $\tan 57^\circ$ (iv) -1 (v) $\tan 48^\circ$

12. $\frac{\cot 54^\circ \tan 43^\circ}{\tan 36^\circ \cot 47^\circ} =$
(i) 1 (ii) 0 (iii) $\tan 43^\circ$ (iv) $\tan 54^\circ$ (v) -1

13. $\frac{\sec 13^\circ \operatorname{cosec} 68^\circ}{\operatorname{cosec} 77^\circ \sec 22^\circ} =$
(i) -1 (ii) 1 (iii) $\tan 13^\circ$ (iv) 0 (v) $\tan 68^\circ$

14. $\frac{\operatorname{cosec} 25^\circ \sec 72^\circ}{\sec 65^\circ \operatorname{cosec} 18^\circ} =$
(i) $\tan 72^\circ$ (ii) 1 (iii) -1 (iv) 0 (v) $\tan 25^\circ$

15. $\sin 70^\circ - \cos 20^\circ =$
(i) $2\sin 70^\circ$ (ii) 0 (iii) $2\sin 20^\circ$ (iv) -1 (v) 1

16. $\cos 47^\circ - \sin 43^\circ =$
(i) 1 (ii) -1 (iii) 0 (iv) $2\sin 47^\circ$ (v) $2\sin 43^\circ$

17. $\tan 67^\circ - \cot 23^\circ =$
(i) $2\sin 67^\circ$ (ii) -1 (iii) $2\sin 23^\circ$ (iv) 0 (v) 1

18. $\cot 36^\circ - \tan 54^\circ =$
(i) 1 (ii) -1 (iii) $2\sin 54^\circ$ (iv) 0 (v) $2\sin 36^\circ$

19. $\sec 8^\circ - \operatorname{cosec} 82^\circ =$
(i) $2\sin 82^\circ$ (ii) $2\sin 8^\circ$ (iii) 0 (iv) 1 (v) -1

20. $\operatorname{cosec} 36^\circ - \sec 54^\circ =$
(i) $2\sin 36^\circ$ (ii) 1 (iii) -1 (iv) 0 (v) $2\sin 54^\circ$

21. $\sin 8^\circ \cos 2^\circ - \cos 82^\circ \sin 88^\circ =$
(i) $2\sin 2^\circ$ (ii) -1 (iii) $2\sin 8^\circ$ (iv) 1 (v) 0

22. $\cos 55^\circ \sin 82^\circ - \sin 35^\circ \cos 8^\circ =$
(i) -1 (ii) 1 (iii) $2\sin 55^\circ$ (iv) $2\sin 82^\circ$ (v) 0

23. $\tan 19^\circ \cot 45^\circ - \cot 71^\circ \tan 45^\circ =$
(i) $2\sin 45^\circ$ (ii) 0 (iii) $2\sin 19^\circ$ (iv) 1 (v) -1

24. $\cot 56^\circ \tan 11^\circ - \tan 34^\circ \cot 79^\circ =$
(i) -1 (ii) $2\sin 56^\circ$ (iii) 0 (iv) $2\sin 11^\circ$ (v) 1

25. $\sec 81^\circ \operatorname{cosec} 24^\circ - \operatorname{cosec} 9^\circ \sec 66^\circ =$
(i) 1 (ii) $2\sin 81^\circ$ (iii) -1 (iv) 0 (v) $2\sin 24^\circ$

26. $\operatorname{cosec} 16^\circ \sec 58^\circ - \sec 74^\circ \operatorname{cosec} 32^\circ =$
(i) 1 (ii) -1 (iii) $2\sin 58^\circ$ (iv) 0 (v) $2\sin 16^\circ$

27. $\sin 30^\circ \cos 90^\circ + \cos 30^\circ \sin 90^\circ =$

- (i) $\frac{1}{2}\sqrt{6}$ (ii) $\frac{1}{2}\sqrt{3}$ (iii) $\frac{1}{2}$ (iv) $\frac{1}{2}\sqrt{3}$ (v) $\frac{3}{2}$

28. Find the value of $\tan 75^\circ \tan 50^\circ \tan 15^\circ \tan 40^\circ$

- (i) 1 (ii) 2 (iii) 0 (iv) -1 (v) undefined

29. Find the value of $\cot 5^\circ \cot 10^\circ \cot 85^\circ \cot 80^\circ$

- (i) 2 (ii) -1 (iii) 1 (iv) 0 (v) undefined

30. $\frac{\sin^2 20^\circ + \sin^2 70^\circ}{\cos^2 75^\circ + \cos^2 15^\circ} =$

- (i) 2 (ii) 1 (iii) undefined (iv) -1 (v) 0

31. $\frac{\sin 15^\circ \cos 75^\circ + \cos 15^\circ \sin 75^\circ}{\sin 50^\circ \cos 40^\circ + \cos 50^\circ \sin 40^\circ} =$

- (i) 1 (ii) 2 (iii) -1 (iv) 0 (v) undefined

32. $\sin 27^\circ + \cos 50^\circ =$

- (i) $\cos 27^\circ + \sin 50^\circ$ (ii) $\cos 63^\circ + \sin 40^\circ$ (iii) $\sin 27^\circ + \sin 50^\circ$ (iv) $\cos 63^\circ + \cos 40^\circ$

33. $\cos 51^\circ + \sin 62^\circ =$

- (i) $\sin 51^\circ + \cos 62^\circ$ (ii) $\sin 39^\circ + \sin 28^\circ$ (iii) $\cos 51^\circ + \cos 62^\circ$ (iv) $\sin 39^\circ + \cos 28^\circ$

34. $\tan 31^\circ + \cot 65^\circ =$

- (i) $\cot 59^\circ + \cot 25^\circ$ (ii) $\tan 31^\circ + \tan 65^\circ$ (iii) $\cot 31^\circ + \tan 65^\circ$ (iv) $\cot 59^\circ + \tan 25^\circ$

35. $\cot 30^\circ + \tan 30^\circ =$

- (i) $\tan 60^\circ + \cot 60^\circ$ (ii) $\tan 30^\circ + \cot 30^\circ$ (iii) $2\tan 60^\circ$ (iv) $2\cot 30^\circ$

36. $\sec 63^\circ + \operatorname{cosec} 38^\circ =$

- (i) $\sec 63^\circ + \sec 38^\circ$ (ii) $\operatorname{cosec} 63^\circ + \sec 38^\circ$ (iii) $\operatorname{cosec} 27^\circ + \operatorname{cosec} 52^\circ$ (iv) $\operatorname{cosec} 27^\circ + \sec 52^\circ$

37. $\operatorname{cosec} 26^\circ + \sec 52^\circ =$

- (i) $\sec 64^\circ + \operatorname{cosec} 38^\circ$ (ii) $\sec 64^\circ + \sec 38^\circ$ (iii) $\operatorname{cosec} 26^\circ + \operatorname{cosec} 52^\circ$ (iv) $\sec 26^\circ + \operatorname{cosec} 52^\circ$

Assignment Key

1) (i)	2) (i)	3) (ii)	4) (iv)	5) (i)	6) (ii)
7) (ii)	8) (i)	9) (i)	10) (iv)	11) (i)	12) (i)
13) (ii)	14) (ii)	15) (ii)	16) (iii)	17) (iv)	18) (iv)
19) (iii)	20) (iv)	21) (v)	22) (v)	23) (ii)	24) (iii)
25) (iv)	26) (iv)	27) (ii)	28) (i)	29) (iii)	30) (ii)
31) (i)	32) (ii)	33) (iv)	34) (iv)	35) (i)	36) (iv)
37) (i)					