



1. $\cos 0^\circ \cot 60^\circ \cos 60^\circ - \tan 60^\circ \sin 30^\circ \operatorname{cosec} 45^\circ =$

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

2. $\frac{\sin 30^\circ \sin 90^\circ - \cot 45^\circ \sin 45^\circ}{\cos 90^\circ \tan 60^\circ - \sin 60^\circ \operatorname{cosec} 60^\circ} =$

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

3. $\frac{\sin 70^\circ}{\cos 20^\circ} =$

- (i) -1 (ii) 1 (iii) $\tan 20^\circ$ (iv) $\tan 70^\circ$ (v) 0

4. $\frac{\cos 49^\circ}{\sin 41^\circ} =$

- (i) $\tan 41^\circ$ (ii) $\tan 49^\circ$ (iii) -1 (iv) 1 (v) 0

5. $\frac{\tan 77^\circ}{\cot 13^\circ} =$

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

6. $\frac{\cot 18^\circ}{\tan 72^\circ} =$

- (i) $\tan 18^\circ$ (ii) 1 (iii) 0 (iv) -1 (v) $\tan 72^\circ$

7. $\frac{\sec 79^\circ}{\operatorname{cosec} 11^\circ} =$

- (i) $\tan 79^\circ$ (ii) 0 (iii) $\tan 11^\circ$ (iv) 1 (v) -1

8. $\frac{\operatorname{cosec} 25^\circ}{\sec 65^\circ} =$

- (i) 0 (ii) -1 (iii) 1 (iv) $\tan 65^\circ$ (v) $\tan 25^\circ$

9. $\frac{\sin 48^\circ \cos 71^\circ}{\cos 42^\circ \sin 19^\circ} =$

- (i) 0 (ii) 1 (iii) $\tan 71^\circ$ (iv) $\tan 48^\circ$ (v) -1

10. $\frac{\cos 82^\circ \sin 33^\circ}{\sin 8^\circ \cos 57^\circ} =$

- (i) -1 (ii) $\tan 33^\circ$ (iii) 1 (iv) 0 (v) $\tan 82^\circ$

11. $\frac{\tan 51^\circ \cot 2^\circ}{\cot 39^\circ \tan 88^\circ} =$
(i) $\tan 2^\circ$ (ii) 0 (iii) $\tan 51^\circ$ (iv) 1 (v) -1

12. $\frac{\cot 68^\circ \tan 80^\circ}{\tan 22^\circ \cot 10^\circ} =$
(i) 1 (ii) -1 (iii) $\tan 68^\circ$ (iv) $\tan 80^\circ$ (v) 0

13. $\frac{\sec 55^\circ \operatorname{cosec} 72^\circ}{\operatorname{cosec} 35^\circ \sec 18^\circ} =$
(i) 1 (ii) 0 (iii) $\tan 72^\circ$ (iv) $\tan 55^\circ$ (v) -1

14. $\frac{\operatorname{cosec} 51^\circ \sec 47^\circ}{\sec 39^\circ \operatorname{cosec} 43^\circ} =$
(i) -1 (ii) 0 (iii) $\tan 51^\circ$ (iv) $\tan 47^\circ$ (v) 1

15. $\sin 76^\circ - \cos 14^\circ =$
(i) 0 (ii) -1 (iii) $2\sin 14^\circ$ (iv) $2\sin 76^\circ$ (v) 1

16. $\cos 51^\circ - \sin 39^\circ =$
(i) $2\sin 51^\circ$ (ii) -1 (iii) $2\sin 39^\circ$ (iv) 1 (v) 0

17. $\tan 77^\circ - \cot 13^\circ =$
(i) $2\sin 13^\circ$ (ii) 1 (iii) -1 (iv) 0 (v) $2\sin 77^\circ$

18. $\cot 81^\circ - \tan 9^\circ =$
(i) 0 (ii) 1 (iii) $2\sin 81^\circ$ (iv) $2\sin 9^\circ$ (v) -1

19. $\sec 2^\circ - \operatorname{cosec} 88^\circ =$
(i) 1 (ii) -1 (iii) $2\sin 2^\circ$ (iv) 0 (v) $2\sin 88^\circ$

20. $\operatorname{cosec} 47^\circ - \sec 43^\circ =$
(i) $2\sin 43^\circ$ (ii) -1 (iii) $2\sin 47^\circ$ (iv) 1 (v) 0

21. $\sin 25^\circ \cos 29^\circ - \cos 65^\circ \sin 61^\circ =$
(i) $2\sin 29^\circ$ (ii) -1 (iii) 0 (iv) $2\sin 25^\circ$ (v) 1

22. $\cos 26^\circ \sin 76^\circ - \sin 64^\circ \cos 14^\circ =$
(i) $2\sin 76^\circ$ (ii) 0 (iii) -1 (iv) 1 (v) $2\sin 26^\circ$

23. $\tan 48^\circ \cot 56^\circ - \cot 42^\circ \tan 34^\circ =$
(i) 1 (ii) -1 (iii) 0 (iv) $2\sin 56^\circ$ (v) $2\sin 48^\circ$

24. $\cot 44^\circ \tan 68^\circ - \tan 46^\circ \cot 22^\circ =$
(i) 1 (ii) 0 (iii) -1 (iv) $2\sin 68^\circ$ (v) $2\sin 44^\circ$

25. $\sec 13^\circ \operatorname{cosec} 81^\circ - \operatorname{cosec} 77^\circ \sec 9^\circ =$
(i) $2\sin 13^\circ$ (ii) -1 (iii) 0 (iv) $2\sin 81^\circ$ (v) 1

26. $\operatorname{cosec} 30^\circ \sec 17^\circ - \sec 60^\circ \operatorname{cosec} 73^\circ =$

- (i) 0 (ii) -1 (iii) 1 (iv) $2\sin 17^\circ$ (v) $2\sin 30^\circ$

27. $\sin 30^\circ \cos 45^\circ + \cos 30^\circ \sin 45^\circ =$

- (i) $(\frac{1}{4}\sqrt{2} + \frac{1}{4}\sqrt{6})$ (ii) $(\frac{1}{4}\sqrt{-1} + \frac{1}{4}\sqrt{6})$ (iii) $(\frac{1}{4}\sqrt{4} + \frac{1}{4}\sqrt{6})$ (iv) $(\frac{1}{4}\sqrt{2} + \frac{3}{2})$ (v) $(\frac{1}{4}\sqrt{2} + \frac{1}{4}\sqrt{6})$

28. Find the value of $\tan 35^\circ \tan 75^\circ \tan 55^\circ \tan 15^\circ$

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

29. Find the value of $\cot 40^\circ \cot 55^\circ \cot 50^\circ \cot 35^\circ$

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

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

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

31. $\frac{\sin 10^\circ \cos 80^\circ + \cos 10^\circ \sin 80^\circ}{\sin 20^\circ \cos 70^\circ + \cos 20^\circ \sin 70^\circ} =$

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

32. $\sin 42^\circ + \cos 45^\circ =$

- (i) $\cos 42^\circ + \sin 45^\circ$ (ii) $\cos 48^\circ + \sin 45^\circ$ (iii) $\sin 42^\circ + \sin 45^\circ$ (iv) $\cos 48^\circ + \cos 45^\circ$

33. $\cos 41^\circ + \sin 49^\circ =$

- (i) $\cos 41^\circ + \cos 49^\circ$ (ii) $\sin 41^\circ + \cos 49^\circ$ (iii) $\sin 49^\circ + \sin 41^\circ$ (iv) $\sin 49^\circ + \cos 41^\circ$

34. $\tan 18^\circ + \cot 37^\circ =$

- (i) $\tan 18^\circ + \tan 37^\circ$ (ii) $\cot 18^\circ + \tan 37^\circ$ (iii) $\cot 72^\circ + \cot 53^\circ$ (iv) $\cot 72^\circ + \tan 53^\circ$

35. $\cot 66^\circ + \tan 63^\circ =$

- (i) $\tan 24^\circ + \tan 27^\circ$ (ii) $\cot 66^\circ + \cot 63^\circ$ (iii) $\tan 24^\circ + \cot 27^\circ$ (iv) $\tan 66^\circ + \cot 63^\circ$

36. $\sec 48^\circ + \operatorname{cosec} 64^\circ =$

- (i) $\operatorname{cosec} 42^\circ + \operatorname{cosec} 26^\circ$ (ii) $\operatorname{cosec} 48^\circ + \sec 64^\circ$ (iii) $\sec 48^\circ + \sec 64^\circ$ (iv) $\operatorname{cosec} 42^\circ + \sec 26^\circ$

37. $\operatorname{cosec} 76^\circ + \sec 73^\circ =$

- (i) $\sec 14^\circ + \sec 17^\circ$ (ii) $\sec 14^\circ + \operatorname{cosec} 17^\circ$ (iii) $\operatorname{cosec} 76^\circ + \operatorname{cosec} 73^\circ$ (iv) $\sec 76^\circ + \operatorname{cosec} 73^\circ$

Assignment Key

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