EduSahara™ Assignment

Name : Trigonometric ratios in terms of other ratios

Chapter : Introduction to Trigonometry

Grade : CBSE Grade X

1. Express $\sin\theta$ in terms of $\cos\theta$

(i) $\frac{\sqrt{1-\cos^2\theta}}{\cos\theta}$ (ii) $\frac{\cos\theta}{\sqrt{1-\cos^2\theta}}$ (iii) $\frac{1}{\sqrt{1-\cos^2\theta}}$ (iv) $\sqrt{1-\cos^2\theta}$ (v) $\frac{1}{\cos\theta}$

2. Express $\sin\theta$ in terms of $\tan\theta$

(i) $\frac{1}{\sqrt{1+\tan^2\theta}}$ (ii) $\frac{\sqrt{1+\tan^2\theta}}{\tan\theta}$ (iii) $\frac{\tan\theta}{\sqrt{1+\tan^2\theta}}$ (iv) $\sqrt{1+\tan^2\theta}$ (v) $\frac{1}{\tan\theta}$

3. Express $\sin\theta$ in terms of $\cot\theta$

(i) $\sqrt{1+\cot^2\theta}$ (ii) $\frac{1}{\sqrt{1+\cot^2\theta}}$ (iii) $\frac{\sqrt{1+\cot^2\theta}}{\cot\theta}$ (iv) $\frac{\cot\theta}{\sqrt{1+\cot^2\theta}}$ (v) $\frac{1}{\cot\theta}$

4. Express $\sin\theta$ in terms of $\sec\theta$

(i) $\frac{1}{\sqrt{\sec^2\theta-1}}$ (ii) $\sqrt{\sec^2\theta-1}$ (iii) $\frac{\sqrt{\sec^2\theta-1}}{\sec\theta}$ (iv) $\frac{1}{\sec\theta}$ (v) $\frac{\sec\theta}{\sqrt{\sec^2\theta-1}}$

5. Express $\sin\theta$ in terms of $\operatorname{cosec}\theta$

(i) $\sqrt{\operatorname{cosec}^2\theta-1}$ (ii) $\frac{\operatorname{cosec}\theta}{\sqrt{\operatorname{cosec}^2\theta-1}}$ (iii) $\frac{\sqrt{\operatorname{cosec}^2\theta-1}}{\operatorname{cosec}\theta}$ (iv) $\frac{1}{\sqrt{\operatorname{cosec}^2\theta-1}}$ (v) $\frac{1}{\operatorname{cosec}\theta}$

6. Express $\cos\theta$ in terms of $\sin\theta$

(i) $\sqrt{1-\sin^2\theta}$ (ii) $\frac{1}{\sqrt{1-\sin^2\theta}}$ (iii) $\frac{\sin\theta}{\sqrt{1-\sin^2\theta}}$ (iv) $\frac{\sqrt{1-\sin^2\theta}}{\sin\theta}$ (v) $\frac{1}{\sin\theta}$

7. Express $\cos\theta$ in terms of $\tan\theta$

(i) $\frac{\tan\theta}{\sqrt{1+\tan^2\theta}}$ (ii) $\frac{1}{\tan\theta}$ (iii) $\frac{1}{\sqrt{1+\tan^2\theta}}$ (iv) $\frac{\sqrt{1+\tan^2\theta}}{\tan\theta}$ (v) $\sqrt{1+\tan^2\theta}$

8. Express $\cos\theta$ in terms of $\cot\theta$

(i) $\sqrt{1+\cot^2\theta}$ (ii) $\dfrac{\cot\theta}{\sqrt{1+\cot^2\theta}}$ (iii) $\dfrac{1}{\sqrt{1+\cot^2\theta}}$ (iv) $\dfrac{\sqrt{1+\cot^2\theta}}{\cot\theta}$ (v) $\dfrac{1}{\cot\theta}$

9. Express $\cos\theta$ in terms of $\sec\theta$

(i) $\dfrac{\sqrt{\sec^2\theta-1}}{\sec\theta}$ (ii) $\dfrac{1}{\sec\theta}$ (iii) $\sqrt{\sec^2\theta-1}$ (iv) $\dfrac{1}{\sqrt{\sec^2\theta-1}}$ (v) $\dfrac{\sec\theta}{\sqrt{\sec^2\theta-1}}$

10. Express $\cos\theta$ in terms of $\operatorname{cosec}\theta$

(i) $\sqrt{\operatorname{cosec}^2\theta-1}$ (ii) $\dfrac{1}{\operatorname{cosec}\theta}$ (iii) $\dfrac{1}{\sqrt{\operatorname{cosec}^2\theta-1}}$ (iv) $\dfrac{\sqrt{\operatorname{cosec}^2\theta-1}}{\operatorname{cosec}\theta}$ (v) $\dfrac{\operatorname{cosec}\theta}{\sqrt{\operatorname{cosec}^2\theta-1}}$

11. Express $\tan\theta$ in terms of $\sin\theta$

(i) $\dfrac{\sin\theta}{\sqrt{1-\sin^2\theta}}$ (ii) $\sqrt{1-\sin^2\theta}$ (iii) $\dfrac{1}{\sin\theta}$ (iv) $\dfrac{\sqrt{1-\sin^2\theta}}{\sin\theta}$ (v) $\dfrac{1}{\sqrt{1-\sin^2\theta}}$

12. Express $\tan\theta$ in terms of $\cos\theta$

(i) $\sqrt{1-\cos^2\theta}$ (ii) $\dfrac{1}{\sqrt{1-\cos^2\theta}}$ (iii) $\dfrac{\sqrt{1-\cos^2\theta}}{\cos\theta}$ (iv) $\dfrac{1}{\cos\theta}$ (v) $\dfrac{\cos\theta}{\sqrt{1-\cos^2\theta}}$

13. Express $\tan\theta$ in terms of $\cot\theta$

(i) $\dfrac{\sqrt{1+\cot^2\theta}}{\cot\theta}$ (ii) $\sqrt{1+\cot^2\theta}$ (iii) $\dfrac{\cot\theta}{\sqrt{1+\cot^2\theta}}$ (iv) $\dfrac{1}{\sqrt{1+\cot^2\theta}}$ (v) $\dfrac{1}{\cot\theta}$

14. Express $\tan\theta$ in terms of $\sec\theta$

(i) $\dfrac{1}{\sec\theta}$ (ii) $\dfrac{1}{\sqrt{\sec^2\theta-1}}$ (iii) $\dfrac{\sqrt{\sec^2\theta-1}}{\sec\theta}$ (iv) $\sqrt{\sec^2\theta-1}$ (v) $\dfrac{\sec\theta}{\sqrt{\sec^2\theta-1}}$

15. Express $\tan\theta$ in terms of $\operatorname{cosec}\theta$

(i) $\sqrt{\operatorname{cosec}^2\theta-1}$ (ii) $\dfrac{1}{\operatorname{cosec}\theta}$ (iii) $\dfrac{\sqrt{\operatorname{cosec}^2\theta-1}}{\operatorname{cosec}\theta}$ (iv) $\dfrac{\operatorname{cosec}\theta}{\sqrt{\operatorname{cosec}^2\theta-1}}$ (v) $\dfrac{1}{\sqrt{\operatorname{cosec}^2\theta-1}}$

16. Express $\cot\theta$ in terms of $\sin\theta$

(i) $\dfrac{\sin\theta}{\sqrt{1-\sin^2\theta}}$ (ii) $\dfrac{1}{\sqrt{1-\sin^2\theta}}$ (iii) $\sqrt{1-\sin^2\theta}$ (iv) $\dfrac{1}{\sin\theta}$ (v) $\dfrac{\sqrt{1-\sin^2\theta}}{\sin\theta}$

17. Express $\cot\theta$ in terms of $\cos\theta$

(i) $\sqrt{1-\cos^2\theta}$ (ii) $\frac{\sqrt{1-\cos^2\theta}}{\cos\theta}$ (iii) $\frac{\cos\theta}{\sqrt{1-\cos^2\theta}}$ (iv) $\frac{1}{\cos\theta}$ (v) $\frac{1}{\sqrt{1-\cos^2\theta}}$

18. Express $\cot\theta$ in terms of $\tan\theta$

(i) $\frac{\tan\theta}{\sqrt{1+\tan^2\theta}}$ (ii) $\sqrt{1+\tan^2\theta}$ (iii) $\frac{1}{\sqrt{1+\tan^2\theta}}$ (iv) $\frac{1}{\tan\theta}$ (v) $\frac{\sqrt{1+\tan^2\theta}}{\tan\theta}$

19. Express $\cot\theta$ in terms of $\sec\theta$

(i) $\frac{1}{\sec\theta}$ (ii) $\sqrt{\sec^2\theta-1}$ (iii) $\frac{\sqrt{\sec^2\theta-1}}{\sec\theta}$ (iv) $\frac{\sec\theta}{\sqrt{\sec^2\theta-1}}$ (v) $\frac{1}{\sqrt{\sec^2\theta-1}}$

20. Express $\cot\theta$ in terms of $\operatorname{cosec}\theta$

(i) $\sqrt{\operatorname{cosec}^2\theta-1}$ (ii) $\frac{\operatorname{cosec}\theta}{\sqrt{\operatorname{cosec}^2\theta-1}}$ (iii) $\frac{\sqrt{\operatorname{cosec}^2\theta-1}}{\operatorname{cosec}\theta}$ (iv) $\frac{1}{\operatorname{cosec}\theta}$ (v) $\frac{1}{\sqrt{\operatorname{cosec}^2\theta-1}}$

21. Express $\sec\theta$ in terms of $\sin\theta$

(i) $\sqrt{1-\sin^2\theta}$ (ii) $\frac{\sin\theta}{\sqrt{1-\sin^2\theta}}$ (iii) $\frac{1}{\sin\theta}$ (iv) $\frac{\sqrt{1-\sin^2\theta}}{\sin\theta}$ (v) $\frac{1}{\sqrt{1-\sin^2\theta}}$

22. Express $\sec\theta$ in terms of $\cos\theta$

(i) $\frac{\cos\theta}{\sqrt{1-\cos^2\theta}}$ (ii) $\sqrt{1-\cos^2\theta}$ (iii) $\frac{1}{\sqrt{1-\cos^2\theta}}$ (iv) $\frac{1}{\cos\theta}$ (v) $\frac{\sqrt{1-\cos^2\theta}}{\cos\theta}$

23. Express $\sec\theta$ in terms of $\tan\theta$

(i) $\frac{1}{\tan\theta}$ (ii) $\frac{1}{\sqrt{1+\tan^2\theta}}$ (iii) $\frac{\sqrt{1+\tan^2\theta}}{\tan\theta}$ (iv) $\frac{\tan\theta}{\sqrt{1+\tan^2\theta}}$ (v) $\sqrt{1+\tan^2\theta}$

24. Express $\sec\theta$ in terms of $\cot\theta$

(i) $\sqrt{1+\cot^2\theta}$ (ii) $\frac{\sqrt{1+\cot^2\theta}}{\cot\theta}$ (iii) $\frac{1}{\sqrt{1+\cot^2\theta}}$ (iv) $\frac{\cot\theta}{\sqrt{1+\cot^2\theta}}$ (v) $\frac{1}{\cot\theta}$

25. Express $\sec\theta$ in terms of $\operatorname{cosec}\theta$

(i) $\frac{\sqrt{\operatorname{cosec}^2\theta-1}}{\operatorname{cosec}\theta}$ (ii) $\sqrt{\operatorname{cosec}^2\theta-1}$ (iii) $\frac{1}{\sqrt{\operatorname{cosec}^2\theta-1}}$ (iv) $\frac{1}{\operatorname{cosec}\theta}$ (v) $\frac{\operatorname{cosec}\theta}{\sqrt{\operatorname{cosec}^2\theta-1}}$

26. Express $\operatorname{cosec}\theta$ in terms of $\sin\theta$

(i) $\dfrac{1}{\sqrt{1-\sin^2\theta}}$ (ii) $\dfrac{\sqrt{1-\sin^2\theta}}{\sin\theta}$ (iii) $\dfrac{\sin\theta}{\sqrt{1-\sin^2\theta}}$ (iv) $\sqrt{1-\sin^2\theta}$ (v) $\dfrac{1}{\sin\theta}$

27. Express $\operatorname{cosec}\theta$ in terms of $\cos\theta$

(i) $\sqrt{1-\cos^2\theta}$ (ii) $\dfrac{1}{\cos\theta}$ (iii) $\dfrac{\sqrt{1-\cos^2\theta}}{\cos\theta}$ (iv) $\dfrac{\cos\theta}{\sqrt{1-\cos^2\theta}}$ (v) $\dfrac{1}{\sqrt{1-\cos^2\theta}}$

28. Express $\operatorname{cosec}\theta$ in terms of $\tan\theta$

(i) $\dfrac{1}{\tan\theta}$ (ii) $\dfrac{1}{\sqrt{1+\tan^2\theta}}$ (iii) $\sqrt{1+\tan^2\theta}$ (iv) $\dfrac{\sqrt{1+\tan^2\theta}}{\tan\theta}$ (v) $\dfrac{\tan\theta}{\sqrt{1+\tan^2\theta}}$

29. Express $\operatorname{cosec}\theta$ in terms of $\cot\theta$

(i) $\dfrac{\cot\theta}{\sqrt{1+\cot^2\theta}}$ (ii) $\dfrac{1}{\sqrt{1+\cot^2\theta}}$ (iii) $\dfrac{\sqrt{1+\cot^2\theta}}{\cot\theta}$ (iv) $\dfrac{1}{\cot\theta}$ (v) $\sqrt{1+\cot^2\theta}$

30. Express $\operatorname{cosec}\theta$ in terms of $\sec\theta$

(i) $\dfrac{\sec\theta}{\sqrt{\sec^2\theta-1}}$ (ii) $\dfrac{\sqrt{\sec^2\theta-1}}{\sec\theta}$ (iii) $\dfrac{1}{\sec\theta}$ (iv) $\dfrac{1}{\sqrt{\sec^2\theta-1}}$ (v) $\sqrt{\sec^2\theta-1}$

31. Express $\sin 71°$ in terms of $\cos 71°$

(i) $\dfrac{\sqrt{1-\cos^2 71°}}{\cos 71°}$ (ii) $\sqrt{1-\cos^2 71°}$ (iii) $\dfrac{1}{\sqrt{1-\cos^2 71°}}$ (iv) $\dfrac{\cos 71°}{\sqrt{1-\cos^2 71°}}$ (v) $\dfrac{1}{\cos 71°}$

32. Express $\sin 71°$ in terms of $\tan 71°$

(i) $\dfrac{\sqrt{1+\tan^2 71°}}{\tan 71°}$ (ii) $\dfrac{1}{\tan 71°}$ (iii) $\dfrac{\tan 71°}{\sqrt{1+\tan^2 71°}}$ (iv) $\sqrt{1+\tan^2 71°}$ (v) $\dfrac{1}{\sqrt{1+\tan^2 71°}}$

33. Express $\sin 30°$ in terms of $\cot 30°$

(i) $\dfrac{\sqrt{1+\cot^2 30°}}{\cot 30°}$ (ii) $\dfrac{\cot 30°}{\sqrt{1+\cot^2 30°}}$ (iii) $\dfrac{1}{\cot 30°}$ (iv) $\sqrt{1+\cot^2 30°}$ (v) $\dfrac{1}{\sqrt{1+\cot^2 30°}}$

34. Express $\sin 61°$ in terms of $\sec 61°$

(i) $\sqrt{\sec^2 61°-1}$ (ii) $\dfrac{\sqrt{\sec^2 61°-1}}{\sec 61°}$ (iii) $\dfrac{\sec 61°}{\sqrt{\sec^2 61°-1}}$ (iv) $\dfrac{1}{\sqrt{\sec^2 61°-1}}$ (v) $\dfrac{1}{\sec 61°}$

35. Express $\sin 67°$ in terms of $\operatorname{cosec} 67°$

(i) $\sqrt{\operatorname{cosec}^2 67° - 1}$ (ii) $\dfrac{\sqrt{\operatorname{cosec}^2 67° - 1}}{\operatorname{cosec} 67°}$ (iii) $\dfrac{\operatorname{cosec} 67°}{\sqrt{\operatorname{cosec}^2 67° - 1}}$ (iv) $\dfrac{1}{\operatorname{cosec} 67°}$ (v) $\dfrac{1}{\sqrt{\operatorname{cosec}^2 67° - 1}}$

36. Express $\cos 31°$ in terms of $\sin 31°$

(i) $\dfrac{1}{\sin 31°}$ (ii) $\dfrac{\sin 31°}{\sqrt{1 - \sin^2 31°}}$ (iii) $\sqrt{1 - \sin^2 31°}$ (iv) $\dfrac{\sqrt{1 - \sin^2 31°}}{\sin 31°}$ (v) $\dfrac{1}{\sqrt{1 - \sin^2 31°}}$

37. Express $\cos 47°$ in terms of $\tan 47°$

(i) $\sqrt{1 + \tan^2 47°}$ (ii) $\dfrac{\sqrt{1 + \tan^2 47°}}{\tan 47°}$ (iii) $\dfrac{\tan 47°}{\sqrt{1 + \tan^2 47°}}$ (iv) $\dfrac{1}{\tan 47°}$ (v) $\dfrac{1}{\sqrt{1 + \tan^2 47°}}$

38. Express $\cos 47°$ in terms of $\cot 47°$

(i) $\dfrac{1}{\sqrt{1 + \cot^2 47°}}$ (ii) $\sqrt{1 + \cot^2 47°}$ (iii) $\dfrac{\cot 47°}{\sqrt{1 + \cot^2 47°}}$ (iv) $\dfrac{\sqrt{1 + \cot^2 47°}}{\cot 47°}$ (v) $\dfrac{1}{\cot 47°}$

39. Express $\cos 53°$ in terms of $\sec 53°$

(i) $\dfrac{1}{\sec 53°}$ (ii) $\sqrt{\sec^2 53° - 1}$ (iii) $\dfrac{\sqrt{\sec^2 53° - 1}}{\sec 53°}$ (iv) $\dfrac{1}{\sqrt{\sec^2 53° - 1}}$ (v) $\dfrac{\sec 53°}{\sqrt{\sec^2 53° - 1}}$

40. Express $\cos 40°$ in terms of $\operatorname{cosec} 40°$

(i) $\dfrac{\operatorname{cosec} 40°}{\sqrt{\operatorname{cosec}^2 40° - 1}}$ (ii) $\dfrac{1}{\operatorname{cosec} 40°}$ (iii) $\dfrac{1}{\sqrt{\operatorname{cosec}^2 40° - 1}}$ (iv) $\dfrac{\sqrt{\operatorname{cosec}^2 40° - 1}}{\operatorname{cosec} 40°}$ (v) $\sqrt{\operatorname{cosec}^2 40° - 1}$

41. Express $\tan 27°$ in terms of $\sin 27°$

(i) $\dfrac{1}{\sin 27°}$ (ii) $\sqrt{1 - \sin^2 27°}$ (iii) $\dfrac{\sqrt{1 - \sin^2 27°}}{\sin 27°}$ (iv) $\dfrac{1}{\sqrt{1 - \sin^2 27°}}$ (v) $\dfrac{\sin 27°}{\sqrt{1 - \sin^2 27°}}$

42. Express $\tan 32°$ in terms of $\cos 32°$

(i) $\dfrac{1}{\cos 32°}$ (ii) $\dfrac{\cos 32°}{\sqrt{1 - \cos^2 32°}}$ (iii) $\dfrac{1}{\sqrt{1 - \cos^2 32°}}$ (iv) $\sqrt{1 - \cos^2 32°}$ (v) $\dfrac{\sqrt{1 - \cos^2 32°}}{\cos 32°}$

43. Express $\tan 22°$ in terms of $\cot 22°$

(i) $\dfrac{\sqrt{1 + \cot^2 22°}}{\cot 22°}$ (ii) $\dfrac{\cot 22°}{\sqrt{1 + \cot^2 22°}}$ (iii) $\dfrac{1}{\sqrt{1 + \cot^2 22°}}$ (iv) $\sqrt{1 + \cot^2 22°}$ (v) $\dfrac{1}{\cot 22°}$

44. Express $\tan 45°$ in terms of $\sec 45°$

(i) $\sqrt{\sec^2 45° - 1}$ (ii) $\dfrac{1}{\sec 45°}$ (iii) $\dfrac{\sec 45°}{\sqrt{\sec^2 45° - 1}}$ (iv) $\dfrac{1}{\sqrt{\sec^2 45° - 1}}$ (v) $\dfrac{\sqrt{\sec^2 45° - 1}}{\sec 45°}$

45. Express $\tan 30°$ in terms of $\operatorname{cosec} 30°$

(i) $\dfrac{1}{\operatorname{cosec} 30°}$ (ii) $\dfrac{\operatorname{cosec} 30°}{\sqrt{\operatorname{cosec}^2 30° - 1}}$ (iii) $\sqrt{\operatorname{cosec}^2 30° - 1}$ (iv) $\dfrac{1}{\sqrt{\operatorname{cosec}^2 30° - 1}}$ (v) $\dfrac{\sqrt{\operatorname{cosec}^2 30° - 1}}{\operatorname{cosec} 30°}$

46. Express $\cot 45°$ in terms of $\sin 45°$

(i) $\dfrac{\sin 45°}{\sqrt{1 - \sin^2 45°}}$ (ii) $\sqrt{1 - \sin^2 45°}$ (iii) $\dfrac{1}{\sqrt{1 - \sin^2 45°}}$ (iv) $\dfrac{\sqrt{1 - \sin^2 45°}}{\sin 45°}$ (v) $\dfrac{1}{\sin 45°}$

47. Express $\cot 23°$ in terms of $\cos 23°$

(i) $\dfrac{\sqrt{1 - \cos^2 23°}}{\cos 23°}$ (ii) $\dfrac{1}{\cos 23°}$ (iii) $\dfrac{1}{\sqrt{1 - \cos^2 23°}}$ (iv) $\dfrac{\cos 23°}{\sqrt{1 - \cos^2 23°}}$ (v) $\sqrt{1 - \cos^2 23°}$

48. Express $\cot 58°$ in terms of $\tan 58°$

(i) $\sqrt{1 + \tan^2 58°}$ (ii) $\dfrac{\sqrt{1 + \tan^2 58°}}{\tan 58°}$ (iii) $\dfrac{1}{\tan 58°}$ (iv) $\dfrac{1}{\sqrt{1 + \tan^2 58°}}$ (v) $\dfrac{\tan 58°}{\sqrt{1 + \tan^2 58°}}$

49. Express $\cot 57°$ in terms of $\sec 57°$

(i) $\dfrac{\sqrt{\sec^2 57° - 1}}{\sec 57°}$ (ii) $\dfrac{\sec 57°}{\sqrt{\sec^2 57° - 1}}$ (iii) $\dfrac{1}{\sec 57°}$ (iv) $\sqrt{\sec^2 57° - 1}$ (v) $\dfrac{1}{\sqrt{\sec^2 57° - 1}}$

50. Express $\cot 70°$ in terms of $\operatorname{cosec} 70°$

(i) $\dfrac{1}{\operatorname{cosec} 70°}$ (ii) $\dfrac{1}{\sqrt{\operatorname{cosec}^2 70° - 1}}$ (iii) $\dfrac{\sqrt{\operatorname{cosec}^2 70° - 1}}{\operatorname{cosec} 70°}$ (iv) $\sqrt{\operatorname{cosec}^2 70° - 1}$ (v) $\dfrac{\operatorname{cosec} 70°}{\sqrt{\operatorname{cosec}^2 70° - 1}}$

51. Express $\sec 75°$ in terms of $\sin 75°$

(i) $\dfrac{1}{\sin 75°}$ (ii) $\dfrac{1}{\sqrt{1 - \sin^2 75°}}$ (iii) $\dfrac{\sqrt{1 - \sin^2 75°}}{\sin 75°}$ (iv) $\sqrt{1 - \sin^2 75°}$ (v) $\dfrac{\sin 75°}{\sqrt{1 - \sin^2 75°}}$

52. Express $\sec 42°$ in terms of $\cos 42°$

(i) $\sqrt{1 - \cos^2 42°}$ (ii) $\dfrac{1}{\sqrt{1 - \cos^2 42°}}$ (iii) $\dfrac{\cos 42°}{\sqrt{1 - \cos^2 42°}}$ (iv) $\dfrac{1}{\cos 42°}$ (v) $\dfrac{\sqrt{1 - \cos^2 42°}}{\cos 42°}$

53. Express $\sec 61°$ in terms of $\tan 61°$

(i) $\frac{\sqrt{1+\tan^2 61°}}{\tan 61°}$ (ii) $\frac{1}{\sqrt{1+\tan^2 61°}}$ (iii) $\frac{\tan 61°}{\sqrt{1+\tan^2 61°}}$ (iv) $\frac{1}{\tan 61°}$ (v) $\sqrt{1+\tan^2 61°}$

54. Express $\sec 34°$ in terms of $\cot 34°$

(i) $\frac{1}{\cot 34°}$ (ii) $\frac{\cot 34°}{\sqrt{1+\cot^2 34°}}$ (iii) $\frac{1}{\sqrt{1+\cot^2 34°}}$ (iv) $\sqrt{1+\cot^2 34°}$ (v) $\frac{\sqrt{1+\cot^2 34°}}{\cot 34°}$

55. Express $\sec 32°$ in terms of $\operatorname{cosec} 32°$

(i) $\frac{1}{\sqrt{\operatorname{cosec}^2 32° - 1}}$ (ii) $\frac{1}{\operatorname{cosec} 32°}$ (iii) $\sqrt{\operatorname{cosec}^2 32° - 1}$ (iv) $\frac{\operatorname{cosec} 32°}{\sqrt{\operatorname{cosec}^2 32° - 1}}$ (v) $\frac{\sqrt{\operatorname{cosec}^2 32° - 1}}{\operatorname{cosec} 32°}$

56. Express $\operatorname{cosec} 59°$ in terms of $\sin 59°$

(i) $\sqrt{1-\sin^2 59°}$ (ii) $\frac{1}{\sqrt{1-\sin^2 59°}}$ (iii) $\frac{1}{\sin 59°}$ (iv) $\frac{\sin 59°}{\sqrt{1-\sin^2 59°}}$ (v) $\frac{\sqrt{1-\sin^2 59°}}{\sin 59°}$

57. Express $\operatorname{cosec} 62°$ in terms of $\cos 62°$

(i) $\frac{\cos 62°}{\sqrt{1-\cos^2 62°}}$ (ii) $\frac{1}{\cos 62°}$ (iii) $\frac{\sqrt{1-\cos^2 62°}}{\cos 62°}$ (iv) $\frac{1}{\sqrt{1-\cos^2 62°}}$ (v) $\sqrt{1-\cos^2 62°}$

58. Express $\operatorname{cosec} 65°$ in terms of $\tan 65°$

(i) $\frac{\sqrt{1+\tan^2 65°}}{\tan 65°}$ (ii) $\frac{1}{\tan 65°}$ (iii) $\sqrt{1+\tan^2 65°}$ (iv) $\frac{1}{\sqrt{1+\tan^2 65°}}$ (v) $\frac{\tan 65°}{\sqrt{1+\tan^2 65°}}$

59. Express $\operatorname{cosec} 76°$ in terms of $\cot 76°$

(i) $\sqrt{1+\cot^2 76°}$ (ii) $\frac{1}{\sqrt{1+\cot^2 76°}}$ (iii) $\frac{1}{\cot 76°}$ (iv) $\frac{\sqrt{1+\cot^2 76°}}{\cot 76°}$ (v) $\frac{\cot 76°}{\sqrt{1+\cot^2 76°}}$

60. Express $\operatorname{cosec} 77°$ in terms of $\sec 77°$

(i) $\sqrt{\sec^2 77° - 1}$ (ii) $\frac{\sec 77°}{\sqrt{\sec^2 77° - 1}}$ (iii) $\frac{1}{\sqrt{\sec^2 77° - 1}}$ (iv) $\frac{\sqrt{\sec^2 77° - 1}}{\sec 77°}$ (v) $\frac{1}{\sec 77°}$

Assignment Key

1) (iv)	2) (iii)	3) (ii)	4) (iii)	5) (v)	6) (i)
7) (iii)	8) (ii)	9) (ii)	10) (iv)	11) (i)	12) (iii)
13) (v)	14) (iv)	15) (v)	16) (v)	17) (iii)	18) (iv)
19) (v)	20) (i)	21) (v)	22) (iv)	23) (v)	24) (ii)
25) (v)	26) (v)	27) (v)	28) (iv)	29) (v)	30) (i)
31) (ii)	32) (iii)	33) (v)	34) (ii)	35) (iv)	36) (iii)
37) (v)	38) (iii)	39) (i)	40) (iv)	41) (v)	42) (v)
43) (v)	44) (i)	45) (iv)	46) (iv)	47) (iv)	48) (iii)
49) (v)	50) (iv)	51) (ii)	52) (iv)	53) (v)	54) (v)
55) (iv)	56) (iii)	57) (iv)	58) (i)	59) (i)	60) (ii)