

I. SOLVE EACH EQUATION IN THE INTERVAL $[0, 2\pi)$.

LEAVE ALL RADICALS IN RADICAL FORM.

NOTE: I INCLUDED A FEW EXTRA ITEMS FOR MORE PRACTICE. THE NUMBER OF ITEMS ON THE EXAM WILL BE SLIGHTLY LESS THAN THE NUMBER OF ITEMS HERE.

1. $2\sin(x) + 8 = 7$

2. $\tan(x) - 1 = 0$

3. $4\cos^2(x) + 7 = 10$

4. $(2\cos(x) + 1)(\tan(x) - 1) = 0$

Note for #3: $\sqrt{\frac{3}{4}} = \frac{\sqrt{3}}{\sqrt{4}} = \frac{\sqrt{3}}{2}$

5. $10\cot(x) + 6.2 = 8.1$

6. $3\csc(x) - 10 = -16$

7. $\sin(x) = 0$

8. $2\sin(x)\tan(x) + \tan(x) = 0$

9. $4.3\sin(x) + 2.1 = 3.9$

10. $2\sin^2(x) + 3\sin(x) + 1 = 0$

11. $2\sin(x)\cos(x) + \cos(x) = 0$

12. $\sec^2(x) - \sec(x) - 2 = 0$

SOLVE #13 & #14 IN THE INTERVAL $(-\infty, \infty)$

13. $\sin^2(x) - 5 = -4$

14. $6\cos(x) + 5 = 8$

CONTINUE SOLVING IN THE INTERVAL $[0, 2\pi)$

15. $2\cos(2x) + \sqrt{3} = 0$

16. $\tan(2x) + 1 = 0$