
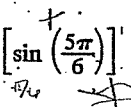
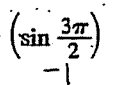
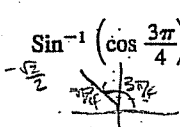

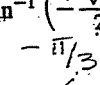

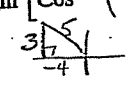
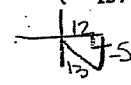
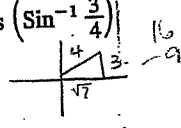
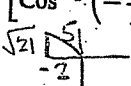
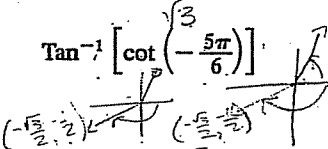
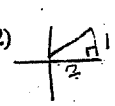
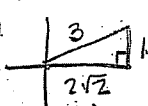
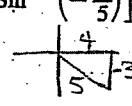
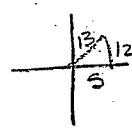
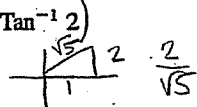
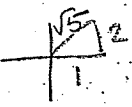
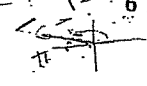
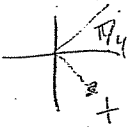
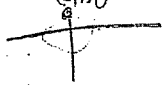


Give the exact value for each. Leave ratios in terms of radicals. You may state angles in terms of  $\pi$  radians or degrees. It will help to sketch your angle for each problem.

- |  |                                 |   |                                 |
|--|---------------------------------|---|---------------------------------|
| 1. $\cos^{-1}\left(\cos \frac{5\pi}{3}\right)$<br>                  | <u><math>\pi/3</math></u>       | 2. $\sin^{-1}\left[\sin\left(\frac{5\pi}{6}\right)\right]$<br>        | <u><math>\pi/6</math></u>       |
| 3. $\cos^{-1}\left(\cos \frac{2\pi}{3}\right)$   | <u><math>2\pi/3</math></u>      | 4. $\sin^{-1}\left(\sin \frac{3\pi}{2}\right)$<br>                    | <u><math>-\pi/2</math></u>      |
| 4. $\sin^{-1}\left(\cos \frac{3\pi}{4}\right)$<br>                   | <u><math>-\pi/4</math></u>      | 5. $\cos^{-1}\left[\sin\left(-\frac{\sqrt{2}}{2}\right)\right]$<br>    | <u><math>5\pi/6</math></u>      |
| 6. $\cos\left[\sin^{-1}\left(-\frac{\sqrt{3}}{2}\right)\right]$<br> | <u><math>\frac{1}{2}</math></u> | 7. $\sin\left[\cos^{-1}\left(-\frac{\sqrt{3}}{2}\right)\right]$<br>    | <u><math>1/2</math></u>         |
| 8. $\sin\left[\cos^{-1}\left(-\frac{4}{5}\right)\right]$<br>        | <u><math>3/5</math></u>         | 9. $\cos\left[\sin^{-1}\left(-\frac{5}{13}\right)\right]$<br>         | <u><math>12/13</math></u>       |
| 10. $\cos\left(\sin^{-1}\frac{3}{4}\right)$<br>                   | <u><math>\sqrt{7}/4</math></u>  | 11. $\sin\left[\cos^{-1}\left(-\frac{2}{5}\right)\right]$<br>        | <u><math>\sqrt{21}/5</math></u> |
| 12. $\cot^{-1}\left(\tan \frac{3\pi}{4}\right)$<br>$\cot^{-1}(-1)$   | <u><math>3\pi/4</math></u>      | 13. $\tan^{-1}\left[\cot\left(\frac{\sqrt{3}}{6}\right)\right]$<br> | <u><math>-\pi/3</math></u>      |
| 14. $\tan(\cot^{-1} 2)$<br>                                       | <u><math>1/2</math></u>         | 15. $\sin(\csc^{-1} 3)$<br>   | <u><math>\frac{1}{3}</math></u> |
| 16. $\tan\left[\sin^{-1}\left(-\frac{3}{5}\right)\right]$<br>     | <u><math>-3/4</math></u>        | 17. $\cot\left[\sin^{-1}\frac{12}{13}\right]$<br>                   | <u><math>5/12</math></u>        |
| 18. $\sin(\tan^{-1} 2)$<br>                                       | <u><math>2\sqrt{5}/5</math></u> | 19. $\cos(\cot^{-1} \frac{1}{2})$<br>                               | <u><math>\sqrt{5}/5</math></u>  |
| 20. $\tan^{-1}\left[\tan \frac{11\pi}{6}\right]$   | <u><math>-\pi/6</math></u>      | 21. $\cot^{-1}\left(\cot \frac{5\pi}{6}\right)$<br>                  | <u><math>5\pi/6</math></u>      |
| 22. $\sec^{-1}\left[\sec\left(-\frac{\pi}{4}\right)\right]$<br>   | <u><math>\pi/4</math></u>       | 23. $\cot^{-1}\left[\cot\left(-\frac{3\pi}{2}\right)\right]$<br>    | <u><math>\pi/2</math></u>       |