

HW 5A- WORKSHEET #2-10, 12, 14

SEE EXAMPLE 1
p. 950

Find all possible values of each expression.

2. $\sin^{-1}\left(-\frac{1}{2}\right)$ 3. $\tan^{-1}\frac{\sqrt{3}}{3}$ 4. $\cos^{-1}\left(-\frac{\sqrt{2}}{2}\right)$


SEE EXAMPLE 2
p. 951

Evaluate each inverse trigonometric function. Give your answer in both radians and degrees.

5. $\cos^{-1}\frac{\sqrt{3}}{2}$ 6. $\tan^{-1}1$ 7. $\cos^{-1}2$
8. $\tan^{-1}(-\sqrt{3})$ 9. $\sin^{-1}\frac{\sqrt{2}}{2}$ 10. $\sin^{-1}0$

SEE EXAMPLE 3
p. 952

11. **Architecture** A point on the top of the Leaning Tower of Pisa is shifted about 13.5 ft horizontally compared with the tower's base. To the nearest degree, how many degrees does the tower tilt from vertical?



SEE EXAMPLE 4
p. 952

Solve each equation to the nearest tenth. Use the given restrictions.

12. $\tan \theta = 1.4$, for $-90^\circ < \theta < 90^\circ$
13. $\tan \theta = 1.4$, for $180^\circ < \theta < 270^\circ$
14. $\cos \theta = -0.25$, for $0 \leq \theta \leq 180^\circ$
15. $\cos \theta = -0.25$, for $180^\circ < \theta < 270^\circ$

13-4 Inverses of Trigonometric Functions 953