

Unit 3 Quiz Review

Date _____ Period _____

Find the exact value of each expression.

1) $\sin^{-1} \frac{\sqrt{3}}{2}$

2) $\cos^{-1} \frac{\sqrt{2}}{2}$

3) $\sin^{-1} \frac{1}{2}$

4) $\tan^{-1} 0$

5) $\tan^{-1} \frac{\sqrt{3}}{3}$

6) $\cos^{-1} 0$

7) $\tan^{-1} \left(\csc -\frac{\pi}{2} \right)$

8) $\cos^{-1} \left(\tan \frac{\pi}{4} \right)$

9) $\tan^{-1} \left(\sin -\frac{\pi}{2} \right)$

10) $\sin^{-1} \left(\cos \frac{3\pi}{4} \right)$

$$11) \cos^{-1} \left(\sin \frac{\pi}{6} \right)$$

$$12) \tan^{-1} \left(\tan \frac{\pi}{6} \right)$$

Write each trigonometric expression as an algebraic expression.

$$13) \cot \cos^{-1} x$$

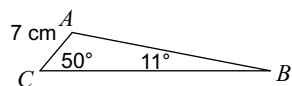
$$14) \sec \cos^{-1} x$$

$$15) \cos \sin^{-1} x$$

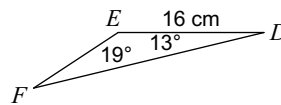
$$16) \tan \cos^{-1} x$$

Find each measurement indicated. Round your answers to the nearest tenth.

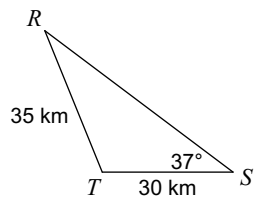
17) Find AB



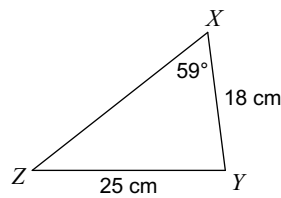
18) Find EF



19) Find $m\angle R$



20) Find $m\angle Z$



Answers to Unit 3 Quiz Review

1) $-\frac{\pi}{3}$

5) $-\frac{\pi}{6}$

9) $-\frac{\pi}{4}$

13) $\frac{x}{\sqrt{1-x^2}}$

17) 28.1 cm

2) $\frac{3\pi}{4}$

6) $\frac{\pi}{2}$

10) $-\frac{\pi}{4}$

14) $\frac{1}{x}$

18) 11.1 cm

3) $-\frac{\pi}{6}$

7) $-\frac{\pi}{4}$

11) $\frac{\pi}{3}$

15) $\sqrt{1-x^2}$

19) 31.1°

4) 0

8) 0

12) $\frac{\pi}{6}$

16) $\frac{\sqrt{1-x^2}}{x}$

20) 38.1°