

Chapter 13 Test Form A

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Name _____

Date _____

In 1–5, evaluate without using a calculator.

1. $\csc 45^\circ$

1. _____

2. $\sin 30^\circ$

2. _____

3. $\cot 60^\circ$

3. _____

4. Find $\sin \theta$ when θ is an acute angle and $\cos \theta = \frac{1}{5}$.

4. _____

5. Find $\sec \theta$ when θ is an acute angle and $\cot \theta = \frac{1}{2}$.

5. _____

In 6–10, use a calculator. Round to three decimal places.

6. $\cos 12^\circ$

6. _____

7. $\tan 69^\circ$

7. _____

8. $\sin 12^\circ$

8. _____

9. $\sec 27^\circ$

9. _____

10. $\csc 20^\circ$

10. _____

Chapter 13 Test

Form A

(Page 2 of 3 pages)

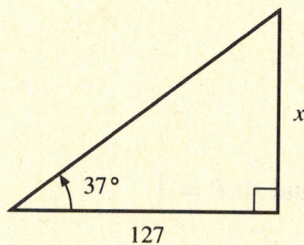
Name _____

11. Which of the angles are coterminal?
 10° , 80° , 370° 11. _____
12. Find the complement of 74° . 12. _____
13. Find the complement of $\frac{\pi}{6}$ radians. 13. _____
14. Find the supplement of 126° . 14. _____
15. Find the supplement of $\frac{\pi}{12}$ radians. 15. _____
16. Convert 48° to radian measure. 16. _____
17. Convert $\frac{7\pi}{15}$ to degree measure. 17. _____
18. The point $(-3, 3)$ is on the terminal side of an angle θ .
Find $\cos \theta$. 18. _____

19. Evaluate. $\arccos\left(-\frac{\sqrt{2}}{2}\right)$

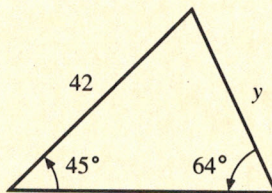
19. _____

20. **Geometry** Solve for x in the triangle shown.



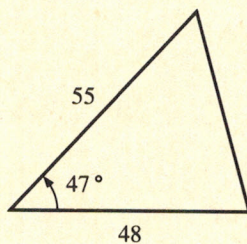
20. _____

21. **Geometry** Solve for y in the triangle shown.



21. _____

22. **Geometry** Find the area of the triangle and the length of the remaining side.



22. _____