

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

**Practice: Trigonometry in the Unit Circle**

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Use the unit circle to state the cosine ratio for each of the following angle measures as a simplified fraction.

1.  $60^\circ$

2.  $\frac{5\pi}{4}$

3.  $270^\circ$

Use the unit circle to state the sine ratio for each of the following angle measures as a simplified fraction.

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

5.  $45^\circ$

6.  $\pi$

Use the unit circle to state the tangent ratio for each of the following angle measures as a simplified fraction.

7.  $30^\circ$

8.  $\frac{3\pi}{4}$

9.  $330^\circ$

Use the unit circle to state the given trigonometric ratio for each of the following angle measures as simplified fractions.

10.  $\sin 30^\circ$

11.  $\cos 60^\circ$

12.  $\tan 45^\circ$

13.  $\sin \frac{2\pi}{3}$

14.  $\cos \frac{11\pi}{6}$

15.  $\tan \frac{7\pi}{4}$

Use the unit circle to state the given trigonometric ratio for each of the following angle measures as simplified fractions.

16.  $\sin(0^\circ)$

17.  $\cos(0^\circ)$

18.  $\tan(0^\circ)$

19.  $\cot(-150)$

20.  $\sec(45)$

21.  $\csc(90)$

Given the exact answer, work backwards to find the trig function and angle

22.  $-\frac{\sqrt{3}}{2}$

23.  $-1$

24.  $-\frac{\sqrt{3}}{3}$

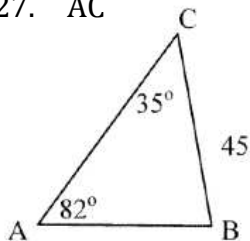
Solve without using a calculator. Answers should be exact.

25.  $\cos 240 = \frac{135}{s}$

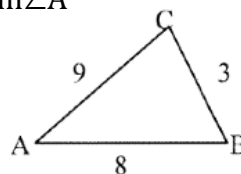
26.  $\sin 315 = \frac{x}{12}$

Review. Solve for the missing side.

27. AC



28.  $m\angle A$



\*\*\*\*QUIZ TOMORROW... YOU WILL NEED TO FILL IN A BLANK UNIT CIRCLE AND FIND THE SINE, COSINE, and TANGENT RATIOS OF CERTAIN DEGREE AND RADIAN MEASURES\*\*\*\*