Name: _____ Date:_____ Period:_____

Pre-Calculus Test #2 4th Six Weeks Review (QUIZ 19) Ms. Hernandez

Trigonometry Test Review

Part I: Multiple choice. Write the number of the correct choice on the line provided.

_____ **1.** In which quadrant does a -285° angle lie?

(1) I **(2)** II **(3)** III **(4)** IV

_____ **2.** Which angle is *not* coterminal with an angle that measures 300°?

(1) -420° **(2)** -300° **(3)** -60° **(4)** 660°

_____ **3.** What is the reference angle for -512°?

(1) -208° **(2)** -28° **(3)** 28° **(4)** 280°

_____ **4.** An angle of $\frac{3\pi}{4}$ radians lies in quadrant

(1) I **(2)** II **(3)** III **(4)** IV

_____ **5.** The value of tan 315° is the same as the value of

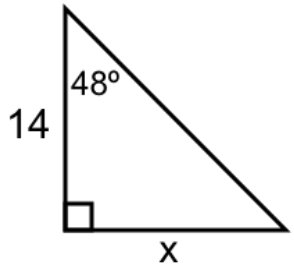
(1) cos 0° **(2)** sin 90° **(3)** tan 135° **(4)** sin 180°

_____ **6.** Express 330° in radian measure.

(1) $\frac{5\pi}{6}$ **(2)** $\frac{5\pi}{3}$ **(3)** $\frac{11\pi}{6}$ **(4)** $\frac{11\pi}{4}$

Part II: Basic Trigonometry. Find the value of *x*, the length of the side, or θ, the degree measure of the angle. Round answers to the nearest *hundredth*.

7.



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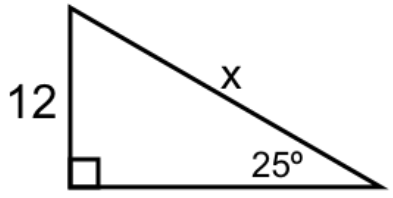

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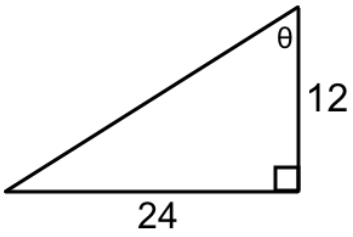

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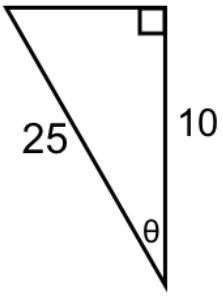

Part III: Coterminal Angles. For each angle in questions 11–13, find a coterminal angle that is between 0° and 360°.

11. 455° **12.** -160° **13.** 825°

Part IV: Unit Circle.

14. If $\sin\theta < 0$ and $\tan\theta > 0$, in which quadrant does θ lie?

15. In which quadrant does an angle of 260° lie? Is cos260° positive or negative?

Part V: Reference Angles.

For questions 16 and 17, find the reference angle of each given angle.

16. 145°

17. 305°

18. Express sin145° as a function of a positive acute angle.

Part VI: Special Angles. Fill in the values of the trigonometric functions for each angle.

19.

θ	**0°**	**30°**	**45°**	**60°**	**90°**	**180°**	**270°**
sinθ							
cosθ							
tanθ							

Part VII: Degrees and Radians.

20. Convert an angle of 210° into radians.

21. Convert an angle of $\frac{5\pi}{9}$ radians into degrees.