

Algebra II/ Trig – Stations Answer Sheet

Name: Kely.

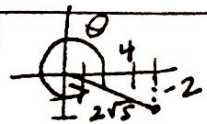
Sec. 13.1- 13.3, 14.1- Trigonometric Functions

Period: 3 7

Date: 4/3/17

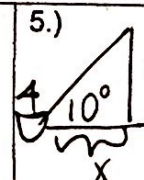
Station 1 Objectives:

- Understand and use the 6 trigonometric relationships of acute angles in triangles. (13.1)

1.) $\sin \theta = 4/5$ $\csc \theta = 5/4$ $\cos \theta = 3/5$ $\sec \theta = 5/3$ $\tan \theta = 4/3$ $\cot \theta = 3/4$	2.) $\sin \theta = \frac{3\sqrt{13}}{13}$ $\csc \theta = \frac{\sqrt{13}}{3}$ $\cos \theta = \frac{2\sqrt{13}}{13}$ $\sec \theta = \frac{\sqrt{13}}{2}$ $\tan \theta = 3/2$ $\cot \theta = 2/3$	3.)  $\sin \theta = -\sqrt{5}/5$ $\csc \theta = -\sqrt{5}$ $\cos \theta = 2\sqrt{5}/5$ $\sec \theta = 2\sqrt{5}$ $\tan \theta = -1/2$ $\cot \theta = -2$
--	--	---

Station 2 Objectives:

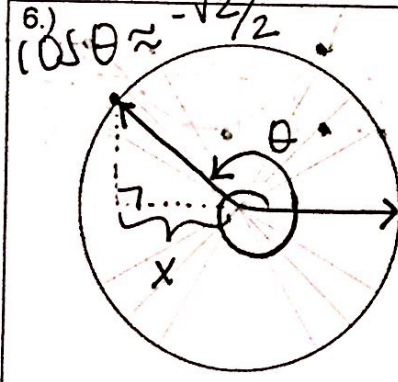
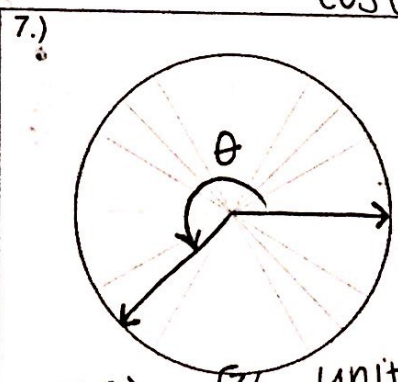
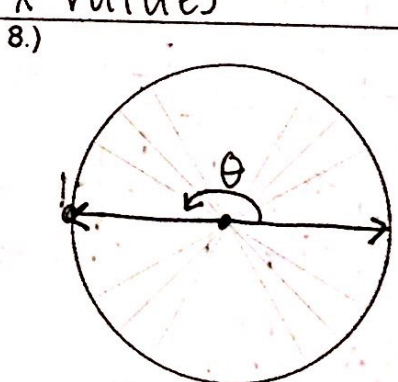
- Determine side lengths of right triangles by using trigonometric functions. (13.1)

a.) 4.) $\tan(52^\circ) = \frac{x}{115m}$ <u>147m</u>	5.)  $\tan 10^\circ = \frac{90}{x}$ $x(\tan 10^\circ) = \frac{90}{\tan(10^\circ)}$ $x = \underline{510 ft.}$
b.) $\cos(52^\circ) = \frac{115}{x}$ <u>187m</u>	

Station 3 Objectives:

- Sketch angles of rotation in standard position. (13.2)

$\cos(\theta) = x\text{-values}$

6.) $\cos \theta \approx -\sqrt{2}/2$ 	7.)  $\cos(\theta) = -\sqrt{2}/2$ unit circle	8.)  $\cos(\theta) = -1$
--	---	--

Station 4 Objectives:

- Find positive and negative coterminal angles of a given angle. (13.2)

9.) coterminal angles are angles in standard position that have a common terminal side.	10.) 115° $+360^\circ$ -360° <u>475°</u> ; <u>-245°</u>	11.) 385° $+360^\circ$ -360° <u>745°</u> ; <u>-25°</u>	12.) $\frac{2\pi}{3}$ rad. $+2\pi$ -2π <u>$\frac{8\pi}{3}$ rad</u> <u>$-\frac{4\pi}{3}$ rad</u>
---	---	--	--

