Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Instructions:** Please complete the following problems.

**Problem 1.** What is the period of the sec and csc functions?

Problem 2. What is the period of cot?

**Problem 3.** What is the domain of cot?

**Problem 4.** Find the LVA and RVA of  $y = \tan(x - \frac{\pi}{4})$ 

**Problem 5.** Find the LVA and RVA of  $y = \tan(2x - \frac{\pi}{4}) - 3$ 

**Problem 6.** Graph  $y = 3 \tan(x - \frac{\pi}{3}) + 2$ 

**Problem 7.** Graph  $y = \tan(2x + \pi)$ 

**Problem 8.** True or False: The non-vertical line makes an angle  $\theta$  with the positive x-axis, then the slope of the line is given by  $m=\tan\theta$ .

**Problem 9.** True or False: The zeros of  $\tan(x)$  are all integer multiples of  $\pi$ 

**Problem 10.** True or False: The domain of tan(x) is all real numbers except multiples of  $\pi$ 

**Problem 11.** What is the range of the  $y = \csc(x)$  and  $y = \sec(x)$  function?

**Problem 12.** What are the x-intercepts of  $y = \csc(x)$  and  $y = \sec(x)$  function?