

Name: _____ / 12

No aids (calculator, notes, text, etc.) are permitted. Show all work for full credit and box your final answer.

1. [4 points] Convert the following angles to appropriate measure:

1. convert $\frac{7\pi}{20}$ to degrees

2. convert 132° to radians

2. [6 points] For the given angle $\theta = \frac{5\pi}{4}$ do the following:

a. find the reference angle θ'

b. calculate $\sin \theta$, $\cos \theta$

c. calculate $\tan \theta'$, $\cot \theta'$

Hint: Sketch the angle θ on the plane.

3. [2 points] Determine the amplitude, period, frequency, and phase shift for the following trigonometric function (Use **appropriate notations for all the terminology above**).

$$f(x) = -\frac{1}{2} \cos(8x + 1)$$