PRE-CALCULUS **Assignment #_____**

EOC Review#4

Name_____Date_____Per_____

Show all the work. NO WORK = NO CREDIT

I. In problems 1-4, θ is an angle in standard position whose terminal side lies on the given quadrant. Find a) $\sin 2\theta$, b) $\cos 2\theta$, and c) $\tan 2\theta$.

1) $\sin\theta = \frac{3}{5}$, Q-II

2) $\cos\theta = -\frac{5}{13}$, Q-III

3) $\sin\theta = -\frac{12}{13}$, Q-IV

4) $\cos\theta = \frac{7}{25}$, Q-I

II. In problems 5-10, use ½ angle formulas to evaluate each expression.

5) sin 15°

6) sin 75°

7) cos 15°

8) tan 75°

9) sin $\frac{x}{2}$, if sin x = $-\frac{3}{5}$, and $\pi < x < \frac{3\pi}{2}$

10) cos $\frac{x}{2}$, if cos x = $\frac{8}{25}$ and $\frac{3\pi}{2} < x < 2\pi$

a) 1)	b)	c)
a) 2)	b)	c)
a) 3)	b)	c)
a) 4)	b)	c)
5)		
6)		
7)		
8)		
9)		
10)		

11) Find the least negative and the least positive angle coterminal with $-\frac{5\pi}{6}$.

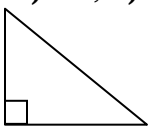
12) Find the reference angle for $318°$.

13) Find $\cos\theta$ if $\frac{\pi}{2} < \theta < \pi$, and $\tan\theta = -\frac{4}{3}$.

14) If $\cos\theta = -\frac{15}{17}$, and $\sin\theta > 0$, find $\cot\theta$.

15) Express $\sin(-320°)$ as a function of an angle in Quadrant I.

16) Given right ΔABC, $m\angle C = 90°$, $m\angle B = 40°$, AC=10. Find
a) AB, **b)** BC and **c)** $m\angle A$. **Round answers to the nearest tenth**.



17) If $\cos x = \frac{3}{5}$, and $\sin x < 0$, find $\cos 2x$.

18) Find the length of an arc "s" of a circle with radius=4 and a central angle = $120°$.

19) Find the exact values of:

a) $\csc\left(-\frac{11\pi}{6}\right)$ b) $\tan(-\pi)$ c) $\cot\pi$ d) $\sec\frac{3\pi}{2}$

20) Find the area of a triangle with sides 7, 14, and 20. Round to the nearest unit.

21) Evaluate: $Sin^{-1}\left(\cos\frac{\pi}{6}\right)$

22) Evaluate: $\sin^{-1}\left(\cos\frac{\pi}{6}\right)$ for $0 \le x \le 2\pi$.

23) Consider the equation: $y = -2\sin(2x+\pi) - 1$. Find: a,b,c,d, and the period. Graph the function . Label the axis correctly. Use graph paper to graph it. Attach it to this sheet. Label the axis correctly.

11)
12)
13)
14)
15)
a) b) c) 16)
17)
18)
19 a) b)
c) d)
20)
21)
22)
a= 23)amp= b=
c= d= per=
reflection? yes/no

DON'T FORGET TO ATTACH GRAPH.