

**PRE CALCULUS
SECTION 5.2
Practice Worksheet**

NAME _____ DATE _____ PER _____ ASSG _____

SHOW ALL THE WORK. DO NOT OMIT STEPS.

I. Find each of the following if: $\sin x_1 = \frac{4}{5}$, $\sin x_2 = -\frac{12}{13}$,

$0 < x_1 < \frac{\pi}{2}$, and $\frac{3\pi}{2} < x_2 < 2\pi$.

1) $\sin(x_1 - x_2)$

2) $\cos(x_1 + x_2)$

3) $\sin(x_1 + x_2)$

4) $\cos(x_1 - x_2)$

II Find each of the following if: $\cos s = -\frac{3}{5}$, $\cos t = -\frac{15}{17}$,

$\frac{\pi}{2} < s < \pi$, and $\pi < t < \frac{3\pi}{2}$.

5) $\sin(s - t)$

6) $\tan(s + t)$

7) $\cos(s + t)$

8) $\sin(s + t)$

9) $\cos(s - t)$

10) $\tan(s - t)$

1)
2)
3)
4)
5)
6)
7)
8)
9)
10)
11)
12)
13)
14)
15)
16)

III. Find the exact answer to each of the following. All answers in simplest form.

11) $\sin 105^\circ$

12) $\cos(-75^\circ)$

13) $\tan 75^\circ$

14) $\sin \frac{13\pi}{2}$

15) $\cos(-\frac{\pi}{12})$

16) $\cos \frac{17\pi}{12}$

And Pg. 668 (4,12,20,24,32,38,42,52,58,60,62)