

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

### 5.4 & 5.5(part 1) Practice Problems

1) Find the exact value:  $\cos 195^\circ$

2) Find the exact value:  $\sin \frac{13\pi}{12}$

3) Find  $\cos(a - b)$ , given that  $\sin a = \frac{8}{17}$  with  $\frac{\pi}{2} < a < \pi$  and  $\cos b = \frac{1}{2}$  with  $0 < b < \frac{\pi}{2}$

4) Find the exact value:  $\tan(-15^\circ)$

5) Find the exact value:  $\sin(75^\circ)$

6) Given  $\cos a = \frac{1}{2}$  with  $0 < a < \frac{\pi}{2}$ , find  $\sin 2a$  and  $\tan \frac{a}{2}$ .

7) Find the exact value:  $\cos \frac{\pi}{2} \cos \frac{\pi}{4} + \sin \frac{\pi}{2} \sin \frac{\pi}{4}$

8) Simplify:  $\tan(x - 2\pi)$