Trigonometry HW 5

1) Convert the following angles from radians to degrees

(a) $\dfrac{5\pi}{6}$

(b) $-\dfrac{8\pi}{3}$

(c) $\dfrac{3\pi}{8}$

(d) $\dfrac{5\pi}{18}$

(e) $\dfrac{7\pi}{12}$

2) Find exact values of the following:

(a) $\cos(\dfrac{3\pi}{2})$

(b) $\sin(\dfrac{3\pi}{2})$

(c) $\tan(\dfrac{3\pi}{2})$

(d) $\sec(\dfrac{3\pi}{2})$

(e) $\csc(\dfrac{3\pi}{2})$

(f) $\cot(\dfrac{3\pi}{2})$

3) Find exact values of the following:

(a) $\cos(\dfrac{7\pi}{6})$

(b) $\sin(\dfrac{7\pi}{6})$

(c) $\tan(\dfrac{7\pi}{6})$

(d) $\sec(\dfrac{7\pi}{6})$

(e) $\csc(\dfrac{7\pi}{6})$

(f) $\cot(\dfrac{7\pi}{6})$

4) Find exact values of the following:

(a) $\cos(\pi)$

(b) $\sin(\pi)$

(c) $\tan(\pi)$

(d) $\sec(\pi)$

(e) $\csc(\pi)$

(f) $\cot(\pi)$

5) Convert the following angles from degrees to radians.

(a) $37°$

(b) $110°$

(c) $-215°$

(d) $325°$

(e) $-800°$

Challenge

For angle A and B, we have the formula $\cos(A + B) = \cos A \cos B + \sin A \sin B$. Use this to find $\cos(75°)$