Homework for Monday, Oct. 10th

Mr. Neeman. 10B, October 7, 2011.

#1. Express each of the following in terms of sines and cosines, and simplify your answer.

(a) $\cos\alpha\cot^2\alpha$

(b) $\tan^2\alpha\sec\alpha$

(c) $\dfrac{\csc^2\alpha}{\cos\alpha}$

(d) $\dfrac{\tan\alpha}{\sec\alpha\csc\alpha}$

#2. Convert each of the following from degrees to radians:

(a) 45°

(b) 60°

(c) 150°

(d) 240°

#3. Convert each of the following from radians to degrees:

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

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

(c) $\dfrac{7\pi}{4}$

(d) $\dfrac{5\pi}{3}$

#4. Calculate each of the following:

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

(b) $\cos\dfrac{\pi}{4}$

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

(d) $\cot\dfrac{\pi}{6}$