Precalculus Name:_____
Ch.5 Test Review #3 Date:_____Period:_____

1. Given that angle A is in Q III with $\sin A = -\frac{40}{41}$, angle B is in Q IV with $\tan B = -\frac{5}{4}$, angle C is in Q II with $\csc C = \frac{13}{12}$, find each of the following. Assume each angle is in the interval $[0, 2\pi)$

a) $\cos(A+B)$

b) $\sin 2B$

c) $\cos\frac{C}{2}$

d) $\tan 2C$

e) $\sin\frac{1}{2}A$

f) $\sin(B-C)$

g) $\tan\frac{1}{2}B$

h) $\cos 2A$

2. Find all solutions in the interval $[0, 2\pi)$ for:

a) $\cos 2x = 11\cos x + 5$

b) $3\sin x = \cos 2x + 1$