Chapter 14 – 1 Day 3
Horizontal Stretch/Shrink

1. $y = 2\cos 3x$  
2. $y = -2\sin 4x$

3. $y = 3\sin 2x + 1$  
4. $y = -\cos \frac{1}{2} x + 2$

5. $y = -6\cos 6x - 3$  
6. $y = 3\sin (-4x) - 3$

7. $y = 5\sin \frac{3}{4} x - 2$  
8. $y = -4\sin x + 1$

For each of the problems above, perform the following a through i parts.

a) Graph for two cycles surrounding the origin.

State each of the following:

b) y-intercept  
c) maximum points

d) minimum points  
e) period

f) amplitude  
g) vertical shift.

h) vertical stretch/shrink  
i) horizontal stretch/shrink

j) reflections