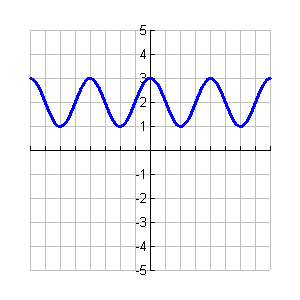
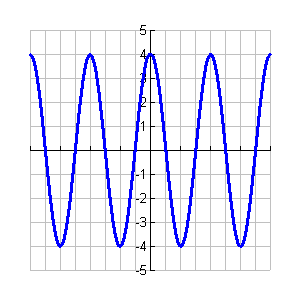
All graphs below are transformations on the graphs of the sine and cosine functions and are of the form:

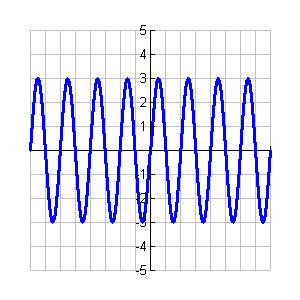
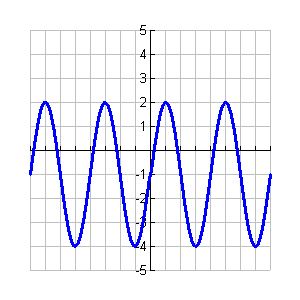


Unless otherwise stated, all windows for the x-axis were set as:



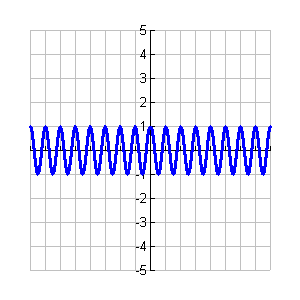
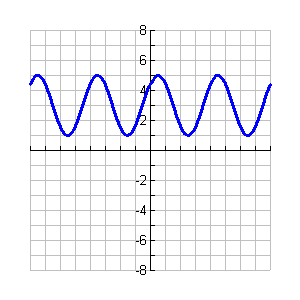
1) *vertical shift only…*  2) *amplitude only…*

Y = \_\_\_\_\_ Y = \_\_\_\_\_\_\_\_

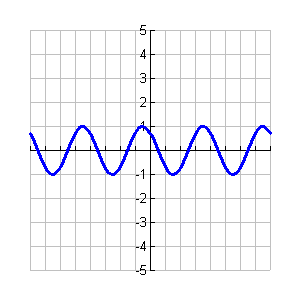
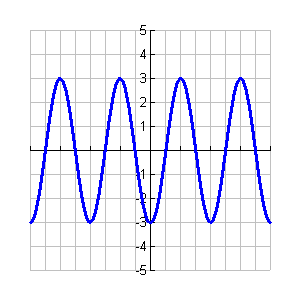


3) *transformation on a sine function…* 4)

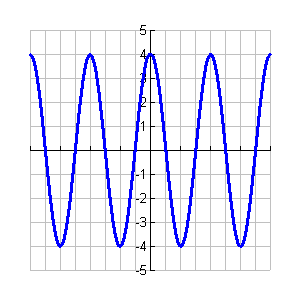
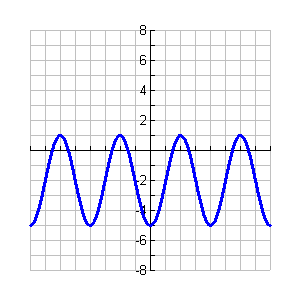
Y = \_\_\_\_\_\_\_\_\_ Y = \_\_\_\_\_\_\_

5) *cosine…* 6) *sine… amplitude/phase shift…*

Y = \_\_\_\_\_\_\_\_\_ Y = \_\_\_\_\_\_\_\_\_\_

7) *cosine… phase shift…* 8) cosine…

9) *sine… amplitude/phase shift…* 10) *cosine…*



Items 11-15: Complete the blanks based on the given equation.

11)  Amplitude: \_\_5\_\_\_\_\_\_\_

Equation of Midline: \_y=0\_\_\_\_\_

Period: \_π\_\_\_\_\_

Phase Shift: \_\_\_ π/8\_\_\_\_\_\_

12)  Amplitude: \_\_\_3\_\_\_\_\_\_

Equation of Midline: \_y=2\_\_\_\_\_

Period: \_\_ π/2\_\_\_\_\_

Phase Shift: \_\_0\_\_\_\_\_\_\_

13)  Amplitude: \_\_2\_\_\_\_\_\_\_

Equation of Midline: \_\_y=-3\_\_\_\_

Period: \_\_\_2\_\_\_\_

Phase Shift: \_\_0\_\_\_\_\_\_\_

14)  Amplitude: \_\_\_1\_\_\_\_\_\_

Equation of Midline: \_y=1\_\_\_\_\_

Period: \_ 2π/3\_\_\_\_

Phase Shift: \_\_ -π/6\_\_\_\_\_\_\_