

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_  
Precalculus Worksheet B: Graphing Sine and Cosine

- A. Determine the amplitude, period, phase shift, and vertical shift of each function.
- B. Sketch the function over two periods. Be sure to draw your graph from  $x = 0$ . Because of the phase shifts, you may have to work backwards to draw this part of the graph.
- C. State the domain and range.

1.  $y = \sin 2x + 3$

2.  $y = \cos(x - \pi)$

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

4.  $y = \cos 2(x - \pi)$

5.  $y = \sin \frac{1}{2}(x - \pi)$

6.  $y = 2 \cos \frac{1}{2}x + 4$

7.  $y = 3 \sin(2x - \frac{\pi}{2}) + 1$

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