Optional Trigonometry Assignment- Worth a Formal Grade X 2 (Same weight as a test)

Discuss the connections between $A, B, C$, and $D$ in the equations:

$$
y=A \sin (B(x-C))+D \text { and } y=A \cos (B(x-C))+D
$$

Specifics:
Your assignment should be typed in paragraph form, double spaced, and 12-pt font. 10 points will be deducted if your paper is hand-written or not double spaced with 12-pt font.

The paper will consist of 6 paragraphs. The first paragraph is a statement about what your paper is about (introduction). The body of the paper will be 4 paragraphs, one for each letter A, $B, C$, and $D$. In each paragraph you will explain what the significance of the letter is, including its effects on the graph. You must include at least 2 different ways to find the values using information from the graph. The last paragraph is a closing statement (conclusion).

The following phrases must be used at least once: horizontal shift, vertical shift, amplitude, and period. 5 points are deducted for each missing phrase.

Due Date: Friday March 23 (regardless if you are A day or B day)
Optional = you can choose to complete the assignment, or not. You do not get to choose if it counts or not. In other words, if you turn it in, it WILL count.

