9. [5 points] Note that throughout this problem, you are not required to show your work. A portion of the graph of a sinusoidal function \( h(x) \) is shown below.

\[
\begin{array}{c}
\text{y} \\
\hline
\text{4} \\
\text{2} \\
\text{y} = h(x) \\
\text{0} \\
\text{-2} \\
\end{array}
\]

\[
\begin{array}{c}
\text{x} \\
\hline
\text{-6} \\
\text{-4} \\
\text{-2} \\
\text{2} \\
\text{4} \\
\text{6} \\
\end{array}
\]

a. [2 points] Which, if any, of the figures below shows part of the graph of \( y = \frac{1}{2} h(x) \)? Note that the scale is smaller than in the original graph above. Be sure to pay attention to the scale indicated on the axes.

\[
\begin{array}{c}
\text{y} \\
\hline
\text{4} \\
\text{2} \\
\text{y} \\
\text{0} \\
\text{-2} \\
\end{array}
\]

\[
\begin{array}{c}
\text{x} \\
\hline
\text{-4} \\
\text{-2} \\
\text{2} \\
\text{4} \\
\text{6} \\
\end{array}
\]

(Option A)

\[
\begin{array}{c}
\text{y} \\
\hline
\text{4} \\
\text{2} \\
\text{y} \\
\text{0} \\
\text{-2} \\
\end{array}
\]

\[
\begin{array}{c}
\text{x} \\
\hline
\text{-4} \\
\text{-2} \\
\text{2} \\
\text{4} \\
\text{6} \\
\end{array}
\]

(Option B)

\[
\begin{array}{c}
\text{y} \\
\hline
\text{4} \\
\text{2} \\
\text{y} \\
\text{0} \\
\text{-2} \\
\end{array}
\]

\[
\begin{array}{c}
\text{x} \\
\hline
\text{-4} \\
\text{-2} \\
\text{2} \\
\text{4} \\
\text{6} \\
\end{array}
\]

(Option C)

Circle your one final answer below. (Only the answer you circle below will be graded.)

Option A  Option B  Option C  NONE OF THESE

b. [3 points] Which, if any, of the figures below shows part of the graph of \( y = h(2x + 2) \)? Note that the scale is smaller than in the original graph above. Be sure to pay attention to the scale indicated on the axes.

\[
\begin{array}{c}
\text{y} \\
\hline
\text{4} \\
\text{2} \\
\text{y} \\
\text{0} \\
\text{-2} \\
\end{array}
\]

\[
\begin{array}{c}
\text{x} \\
\hline
\text{-4} \\
\text{-2} \\
\text{2} \\
\text{4} \\
\text{6} \\
\end{array}
\]

(Option A)

\[
\begin{array}{c}
\text{y} \\
\hline
\text{4} \\
\text{2} \\
\text{y} \\
\text{0} \\
\text{-2} \\
\end{array}
\]

\[
\begin{array}{c}
\text{x} \\
\hline
\text{-4} \\
\text{-2} \\
\text{2} \\
\text{4} \\
\text{6} \\
\end{array}
\]

(Option B)

\[
\begin{array}{c}
\text{y} \\
\hline
\text{4} \\
\text{2} \\
\text{y} \\
\text{0} \\
\text{-2} \\
\end{array}
\]

\[
\begin{array}{c}
\text{x} \\
\hline
\text{-4} \\
\text{-2} \\
\text{2} \\
\text{4} \\
\text{6} \\
\end{array}
\]

(Option C)

Circle your one final answer below. (Only the answer you circle below will be graded.)

Option A  Option B  Option C  NONE OF THESE