## A parabolic investigation

A rectangular sheet of card, with perimeter $=80 \mathrm{~cm}$ is made into an open-topped box, by folding in $2 \mathrm{~cm} \times 2 \mathrm{~cm}$ squares from each corner.
Investigate the relationship between $x$, the length of one side of the card and C , the capacity of the box.


