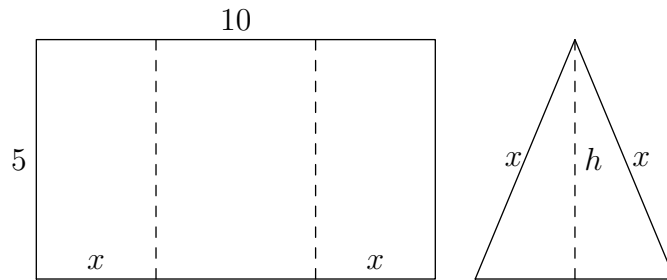


MTH 132.12 Quiz 9
Friday 1 April 2011

Name:

Show *all* your work. Points will be deducted for incomplete work. No calculators are allowed.

I have a 5-by-10-inch rectangle of paper. I want to fold the paper at two places along the 10-inch side to make a triangular prism. See the figures below.



1. Find h in terms of x .
2. Write a formula for the area of the cross-section in terms of x .
3. How far in from the edge of the paper should I make my folds, in order to maximize the volume of the resulting prism?