

MA241
Homework #7
Due Monday, December 2

1. My extensions for Filling and Wrapping, #2, 3, 8, 9, 11, 13, 17, 22.
2. Consider the portion of the parabola with equation $y = x^2$ that lies between $x = -2$ and $x = 2$. Rotate this curve about the y -axis and determine the volume of the resulting bowl.
3. Answer the following questions for the Teacher's Guide:
 - (a) State all the objectives and the NCTM standards once for the entire book; you don't have to do this for every individual investigation.
 - (b) Investigation 1: Problem 1.1 (you don't need to test each pattern by cutting it out and folding it into a box).
 - (c) Investigation 2: Problem 2.1; Mathematical Reflections 1.
 - (d) Investigation 3: Find the exact answers, not estimates, to Problem 3.3A, assuming that four prisms are each folded as on page 27 from a sheet of 8.5 inch by 11 inch paper.
 - (e) Investigation 4: Problem 4.3A; ACE problem 13 (Provide exact answers, not estimates, assuming that the sheet of paper measures 8.5 inches by 11 inches).
 - (f) Investigation 5: Problem 5.3; ACE problem 3; Mathematical Reflections 1.
 - (g) Investigation 6: ACE problem 17.
 - (h) Investigation 7: ACE problems 1, 4, 5, 6.