Math 221 Students
University of Evansville
Evansville, IN 47714

Dear Calculus Students,

I have let my barn repairs go for too long, and now I find myself in a predicament. Although the barn is structurally sound and the roof is fine, the siding is rotting. When I went looking for some help in deciding on the best way to proceed, your enterprising and resourceful professor naturally referred me to you.

Mr. Chaney has offered to sell me aluminum siding that is either two and a half feet, one and a half feet or one foot wide. I can order the siding in any length that I need, and the cost is $3.25 per square foot. Since I can get Ed from over at the Douglas place to do the labor for next to nothing, my only real expense is the cost of the siding from Mr. Chaney. I want to do the entire barn in the same width siding, so for each width, I need to know what lengths of siding I should order and how much it will cost.

I know that there will be some wasted material due to the shape of the barn. Being the environmentally aware individual that I am, I’d like to know how much siding will be wasted; I’d be interested in any suggestions you have for what I can do with the leftovers.

I’ve included a sketch of the barn. Mr. Chaney has only guaranteed his prices through December 9, so I would greatly appreciate your report by then.

Yours sincerely,
Arnold Zinfandel