Problem of the Week
Problem B
Paving the Way

Munit’s driveway is 8 m wide and 16 m long. He wants to cover the entire rectangular area with pavers which are only available in sets of 10 pavers. Each set of 10 pavers covers 3 square metres in total.

a) If each set of 10 pavers costs $100, how much will it cost Munit to buy enough sets of pavers for the job? Add 1 extra set of pavers to your purchase to allow for possible breakage.

b) Each paver in a set is $\frac{1}{2}$ m by $\frac{3}{5}$ m. Make a plan for placing the pavers so that they completely cover the driveway. In your design, how many pavers will need to be cut in order to fit the driveway? How much will be cut from each of these pavers?

You may assume the pavers can be laid either horizontally or vertically. There are many ways to place the pavers. Compare your design to the design of others in your class.