Problem of the Week
Problem B
A Stoney Problem

Sela is doing some landscaping, and needs to pave a rectangular space with an area of 53.5 m^2. She plans to use paving stones which are 10 cm by 20 cm, and so each has an area of 200 cm^2 each. Note that only whole paving stones will be used.

At the Home Shop, Sela learns that these pavers are sold on pallets of 1000 stones, and she must buy complete pallets at \$499 each.

(a) How many stones will she need to cover the 53.5 m^2 area?

(b) How many pallets will she need to buy?

(c) How many stones will be left on the last pallet Sela uses?

(d) If Sela is able to buy partial pallets, how much would she save if she only bought the paving stones she needed?