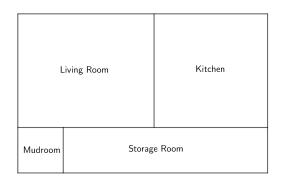
Problem of the Week Problem C Dollhouse

The first level of a dollhouse is in the shape of a rectangle. Its floor plan is shown in the following diagram.



Both the mudroom and the kitchen are square with areas of 400 cm^2 and 2500 cm^2 , respectively. The living room is rectangular with an area of 3000 cm^2 . Determine the area of the rectangular storage room.