# Problem of the Week <br> Problem B <br> Jafar's New Floor 

Jafar is laying new hardwood flooring in his rectangular living room, which has an area of $66 \mathrm{~m}^{2}$. Each box of flooring has 8 identical wooden planks, and each plank has an area of $0.2 \mathrm{~m}^{2}$.
(a) Assuming that there is no waste, how many planks will he need to cover the floor of his living room?
(b) If Jafar wants to buy an extra $10 \%$ for waste, how many boxes of flooring does he need to buy?
(c) If each box costs $\$ 74.50$ and sales tax is $15 \%$, what will be the total cost of the flooring in part (b)?


