# Problem of the Week <br> Problem B <br> Redecoration Station 

Nimrat wants to redecorate her bedroom. The floor plan for her bedroom is shown below.


The walls in Nimrat's bedroom are 2.5 m high.
(a) Nimrat wants nice, plush, wall-to-wall carpet in her bedroom. How many square metres of carpet will she need to buy? If the carpet she buys costs $\$ 20$ per square metre, how much will her carpet cost in total?
(b) Wallpaper costs $\$ 8$ per square metre. How much wallpaper will she need to cover the north and east walls? How much will it cost for the wallpaper for those two walls?
(c) She decides to paint the south and west walls, and the cost for paint to do so is $\$ 75$. If her total budget is $\$ 500$ for carpet, wallpaper, and paint, how much over or under her budget is she?

