Problem of the Week

Problem C

New Steps

The POTW clubhouse needs to replace their front steps. A suggestion for the steps is shown below. The steps are of equal depth and equal height. The steps are 120 cm high, 120 cm from front to back and 100 cm wide.

The stairs are to be painted gold and the two sides are to be painted black. One of the two sides that is to be painted black is shaded in the diagram. The back and bottom of the structure will not be seen and will not be painted.

Determine the total area to be painted gold and the total area to be painted black.