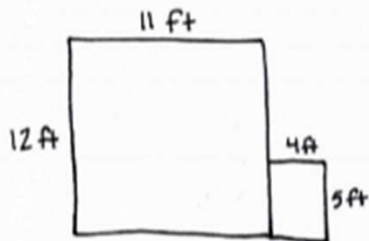


Area of Composite Shapes Worksheets (Rectangles)

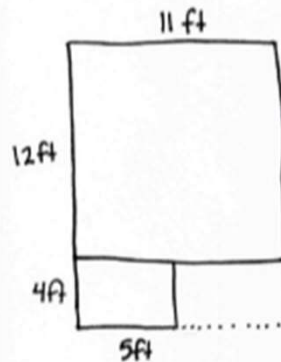
1. Emma's rectangular bedroom is 11 ft long and 12 ft wide with an attached closet that is 4 ft by 5 ft. How many square feet of carpet does Emma need to cover both the bedroom and closet?

Solution A



$$\begin{aligned} A &= (11 \times 12) + (4 \times 5) \\ &= 132 + 20 \\ &= 152 \end{aligned}$$

Solution B

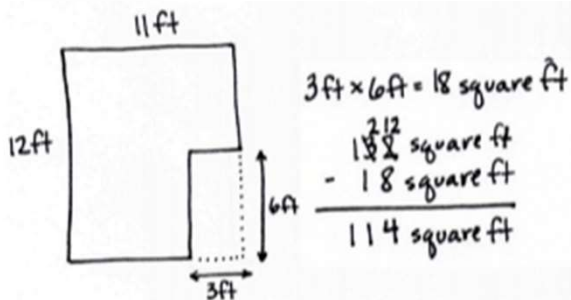


$$\begin{aligned} A &= (16 \times 11) - (4 \times 6) \\ &= 176 - 24 \\ &= 152 \end{aligned}$$

Emma needs 152 square feet of carpet to cover her bedroom and closet floor.

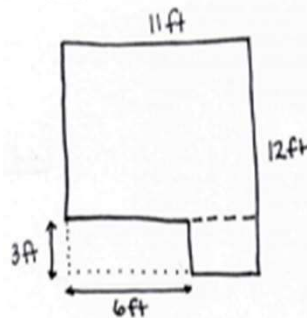
2. To save money, Emma is no longer going to carpet her closet. In addition, she wants one 3 ft by 6 ft corner of her bedroom to be wood floor. How many square feet of carpet will she need for the bedroom now?

Solution A



$$\begin{aligned} 3 \text{ ft} \times 6 \text{ ft} &= 18 \text{ square ft} \\ 132 \text{ square ft} & \\ - 18 \text{ square ft} & \\ \hline 114 \text{ square ft} & \end{aligned}$$

Solution B



$$\begin{aligned} A &= (9 \times 11) + (3 \times 5) \\ &= 99 + 15 \\ &= 114 \end{aligned}$$

Now, Emma needs 114 square feet of carpet for her bedroom.