6.G Wallpaper Decomposition

Task

Jamie is planning to cover a wall with red wallpaper. The dimensions of the wall are shown below:

![Wallpaper Diagram]

a. How many square feet of wallpaper are required to cover the wall?

b. Wallpaper comes in long rectangular strips which are 24 inches wide. If Jamie lays the strips of wallpaper vertically, can she cover the wall without wasting any wallpaper? Explain.

c. If Jamie lays the strips of wallpaper horizontally, can she cover the wall without wasting any wallpaper? Explain.