Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_ M

**6th Grade Unit 5 Performance Task**

Yolanda is building a patio in her backyard. She is interested in using both brick and wood for the flooring of the patio. Below is the plan she has created for the patio. All measurements are in feet.

**Part A:** Create an expression to represent the total area of the patio.



Expression:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part B:** Create an equivalent expression using the distributive property.

***Show your work:***

Expression:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part C:** Yolanda’s husband develops another plan for the patio because he prefers the patio to be much wider than Yolanda’s plan. Below is Yolanda’s husband’s plan. The width and area of each section is labeled. Determine the length of the brick section and the length of the wood section.



***Show your work:***

Answer: Length of the brick section:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Length of the wood section:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part D:** Use the dimensions to write an expression to represent the area of the entire patio that Yolanda’s husband designed.

Expression:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_