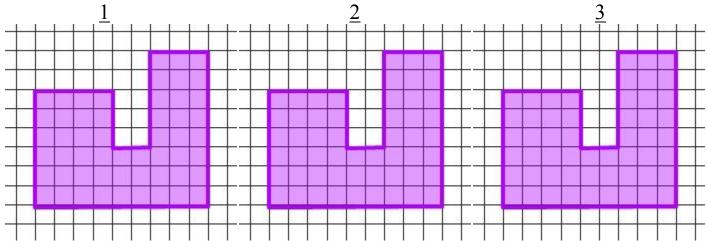
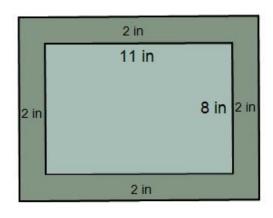
6. Three copies of the same figure are shown below. Each square represents one square unit. There are many ways to find the area of this figure.

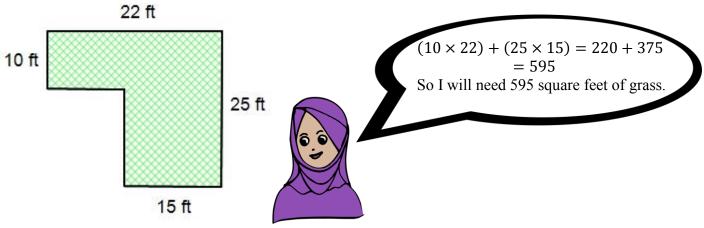


- a. Split this figure into different non-overlapping regions in at least three ways. Show your work above.
- b. For every figure that you split in part a write an expression that represents the area of the sum of the regions.
- c. Find the total area of the figure.
- 7. Gloria is painting a feature wall in her bedroom. The dimensions of the wall measure 14 feet by 11 feet. The gallon of paint that she purchased will cover 400 square feet. Does she have enough paint to do two coats on the wall? Justify your answer.
- 8. Steven is designing a rectangular frame to go around a drawing that measures 11 inches by 8 inches, he has budgeted \$15.00 to cover the cost of the material for the frame. He would like the frame to be 2 inches wide around the perimeter of the drawing. The diagram below shows the dimensions of the drawing and the frame. The material for the frame costs \$0.20 per square inch. Will Steven have enough money to cover the cost of the frame?



## Find, Fix, and Justify

9. Antonia is laying grass sod in her back yard. She has drawn a diagram of where she would like to put the grass. Antonia's calculation to find the area of the yard that will need grass sod is shown. She has made a mistake. Find Antonia's mistake, explain what she did wrong, and then find the correct area. Assume that all angles that appear to be right angles are right angles.



Directions: For numbers 9-12 find the total area of each figure by decomposing it into non-overlapping regions.

Assume that all angles that appear to be right angles are right angles.

