A.)   **Summary:**

An _____ _____ figure is a shaped composed of rectangles.

_____ is the sum of the lengths of each of the sides of a _____. -OR- (The

_____ around a polygon. To find the area of a composite rectangular figure you can divide the figure

into smaller _____ (quadrilaterals) and compute the area of each. Once you have found the area of each

quadrilateral you must find the _____ of each of the smaller areas- this is the total area of the entire

polygon.

Draw the lines in the Diagram to show how you broke up the polygon into smaller quadrilaterals. Write the dimensions inside each of the quadrilaterals.

54 cm

19 cm

36 cm

26 cm
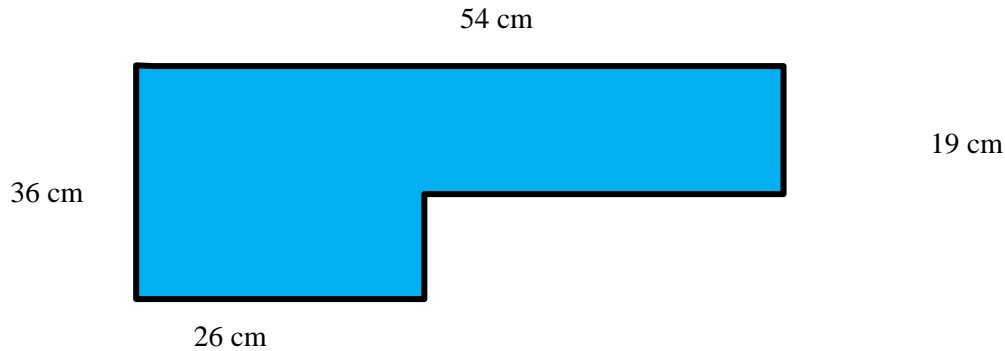
STATION #1:   **BLUE POLYGON**

a.)   **List the shapes you could "break" the large polygon into. (See diagram.)**

SHAPE (NAME)	DIMENSIONS (l ● w)	AREA of SHAPE
		Square Units
		Square Units
TOTAL (Sum of all the smaller quadrilaterals)		Square Units

b.)   **Explain why you must break up the large polygon into smaller quadrilateral in order to find the total area?**

_____

_____

_____

_____

_____

STATION #2:   **HORSES EATING GRASS**

Draw the lines in the Diagram to show how you broke up the polygon into smaller quadrilaterals. Write the dimensions inside each of the quadrilaterals.

135 feet

125 feet

32 feet

42 feet
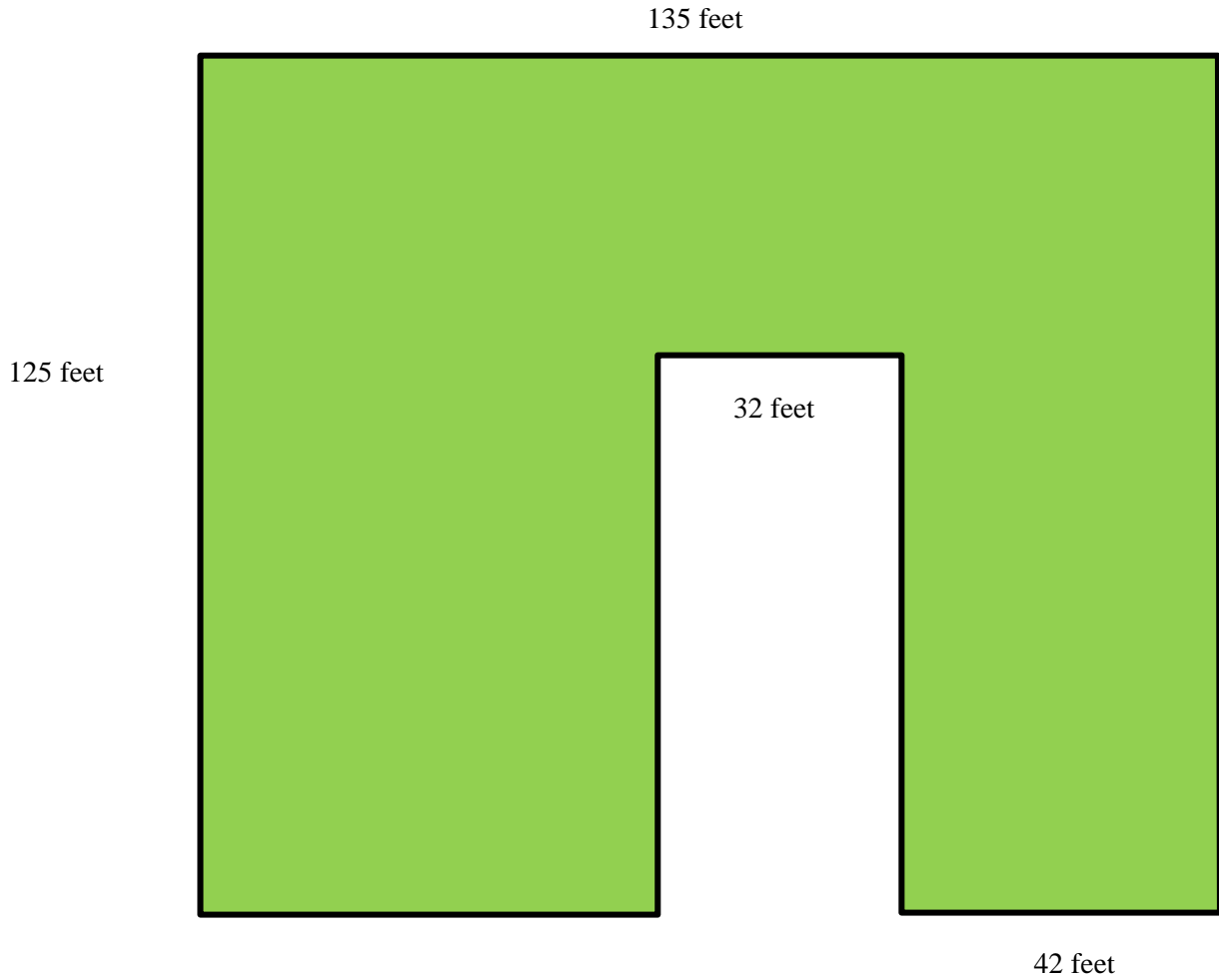
a.)   **A farmer has a plot with the following dimensions (See diagram.)**

How many square feet of land does the farmer have?

b.)   If he has 4 horses that each eat 15 square feet of grass per month. How many months will his plot of land last?

c.)   Approximately, how many years is this equal to? (12 months in 1 year.)

STATION #3:   **ORANGE POLYGON**

Draw the lines in the Diagram to show how you broke up the polygon into smaller quadrilaterals. Write the dimensions inside each of the quadrilaterals.

90 units

15 units

45 units

25 units

45 units

10 units
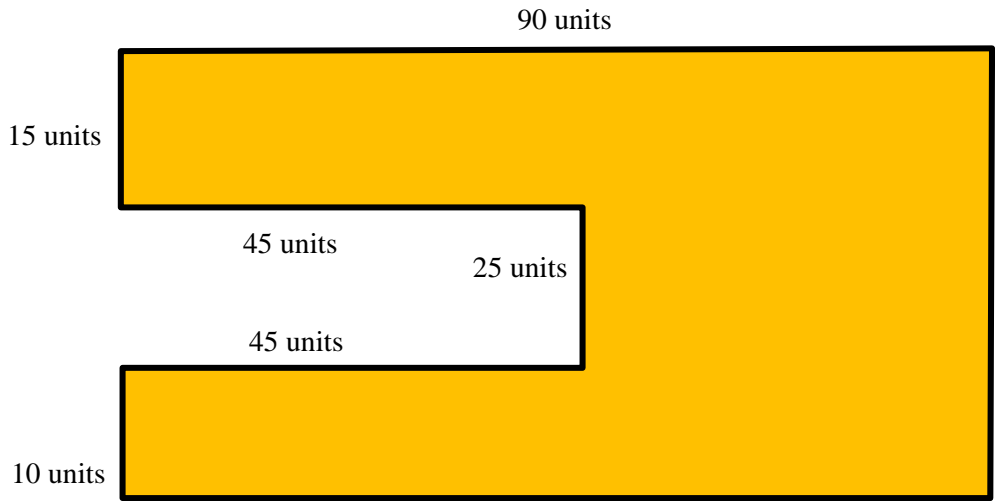
a.)   **What is the perimeter of the orange polygon?**

_____ **units**

b.)   **What is the area of the orange polygon?**

_____ **square units**

c.)   **Explain the difference between perimeter and area in regards to the composite rectangular figure.**

_____

_____

_____

_____

_____

_____

Draw the lines in the Diagram to show how you broke up the polygon into smaller quadrilaterals. Write the dimensions inside each of the quadrilaterals.

18 feet

5 feet

13 feet

11 feet

13 feet

28 feet

20 feet

13 feet

5 feet
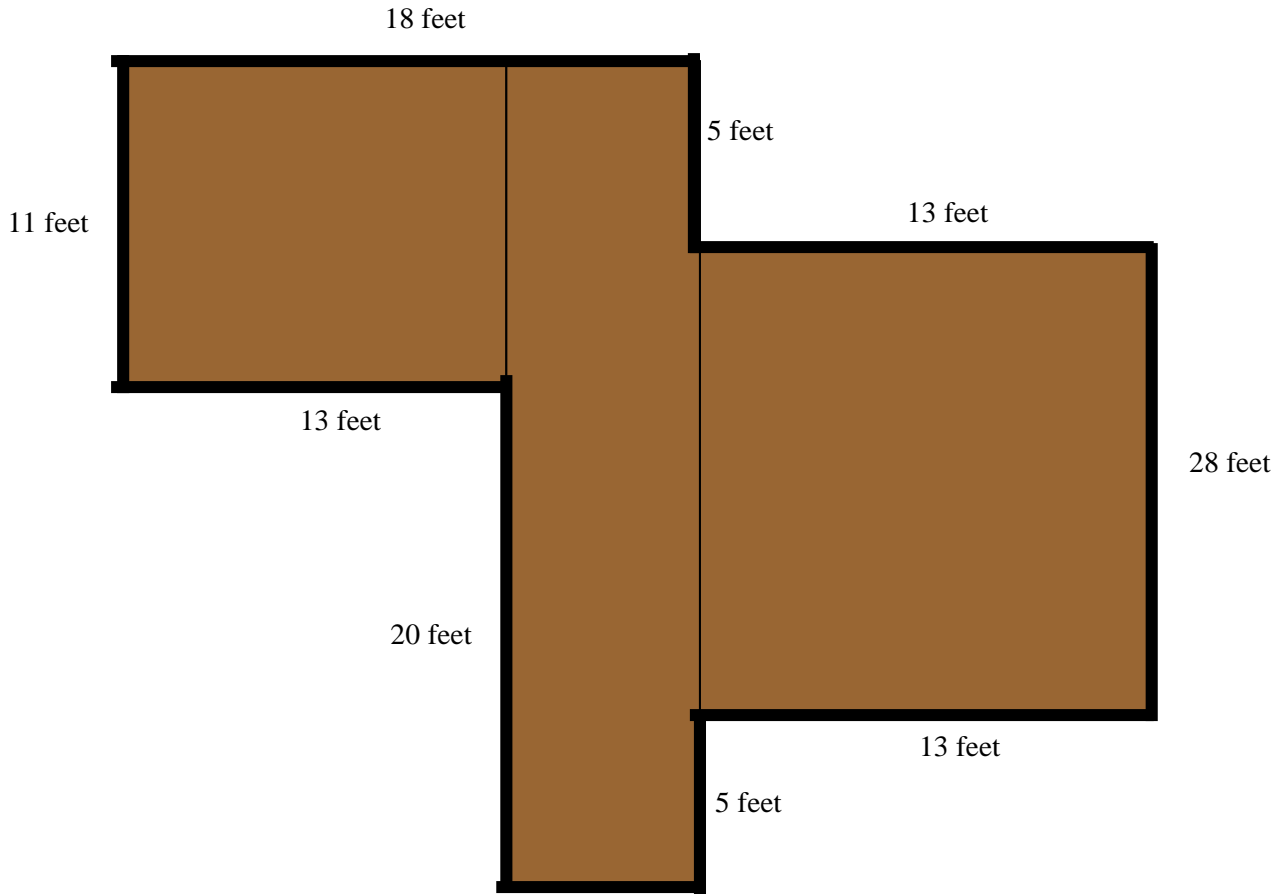
Keith and Ellery would like to replace the wood flooring in their house. They want to put wood flooring in the hallway, living room and dining room. All the rooms are on the first floor. (See diagram.)

a.)   According to the dimensions given, how large is the area of all the rooms they would like to replace the flooring of?   (square feet)

b.)   If the flooring they would like to buy is $3.50 a square foot; How much will the flooring cost them?

c.)   Keith and Ellery have save $1,000 for the new flooring. Have they saved enough? If not, how much more money do they need to save?