

Area Problem Solving Activity

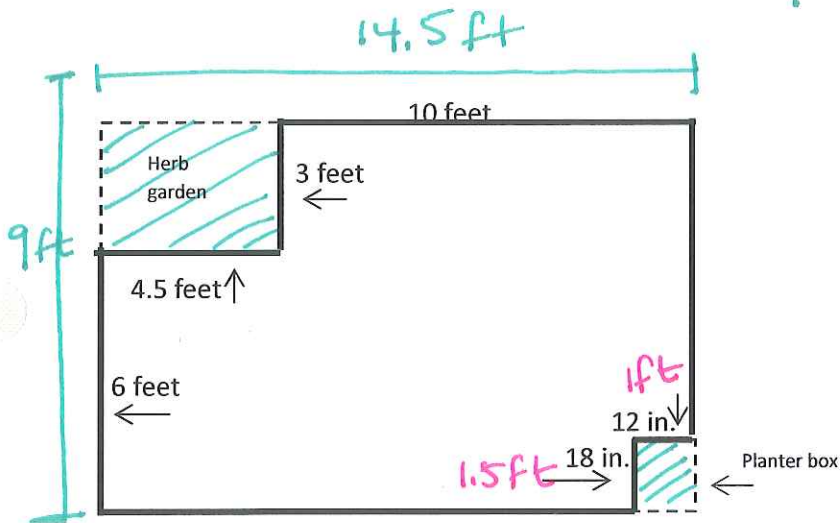
Name Solutions

The purpose of this exercise is not to just get the correct answer, but to come up with as many different ways to get the answer as you can.

Can you come up with at least two different ^{ways?} answers? Three ways? More?

Martin wants to create a gravel patio in his back yard. He needs to know the area of the yard in order to buy the right amount of gravel, since one bag of gravel will cover 3 square feet. Use the diagram of his patio area to calculate its area, and then determine how many bags of gravel he will need to buy. (Remember that he will need to buy bags in whole numbers.)

Be sure to clearly show your work so anyone can understand how you got your answer, and state your answers in a complete sentence.



1st way: Subtract from the whole

$$(14.5)(9) - (1)(1.5) - 3(4.5)$$

$$130.5 - 1.5 - 13.5$$

$$= 115.5 \text{ ft}^2$$

$$115.5 \div 3$$

$$= 38.5 \text{ bags}$$

So he would have to buy 39 bags.

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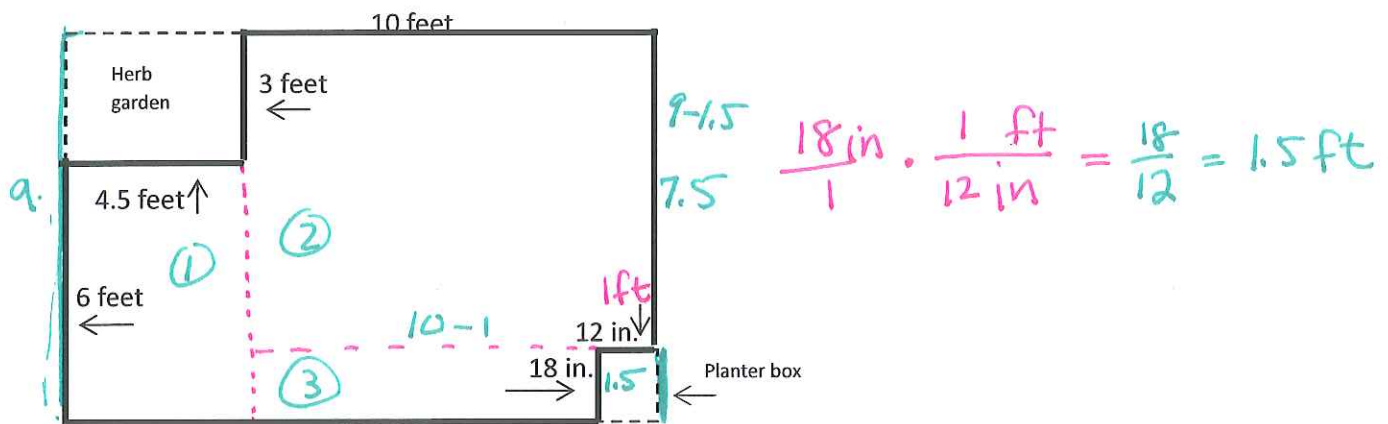
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Area

① $4.5 \times 6 = 27 \text{ ft}^2$

② $7.5 \times 10 = 75 \text{ ft}^2$

③ $9 \times 1.5 = 13.5 \text{ ft}^2$

115.5 ft^2

divide by 3 = 38.5

He needs 39 bags.