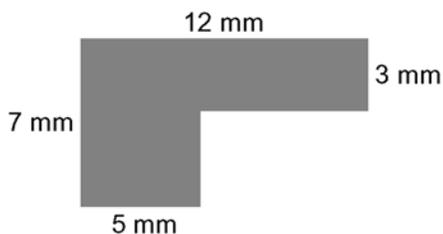


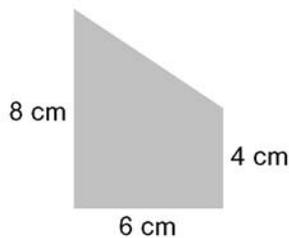
## Section 1.1 Area

1. a) Draw a line to divide each shape into component shapes. Name each component shape.

i)



ii)

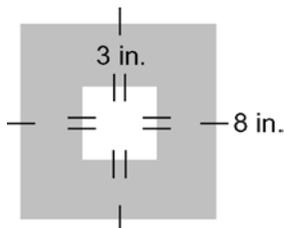


b) Calculate the total area of each composite shape in part a) using components.

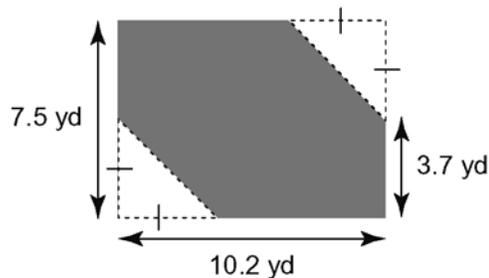
2. Calculate the total area of each shape in question 1 using net area.

3. Explain how the steps you used in questions 1 and 2 are different.

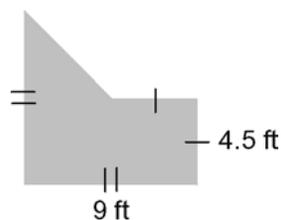
4. Determine the net area of this shape.



5. Determine the area of this shape.

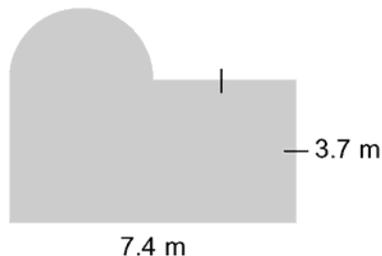


6. Consider this flowerbed.



- Calculate the total area using components.
- Calculate the total area using net area.
- Which method was easier? Explain.

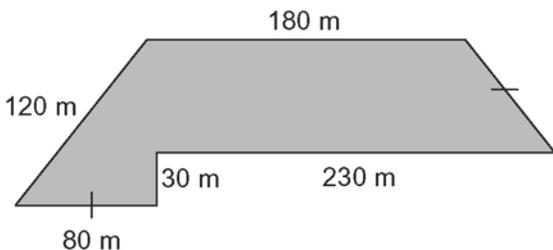
7. a) Determine the missing dimensions of this garden. Explain how you calculated these measures.



- Determine the total area of the garden, to the nearest tenth of a square metre.

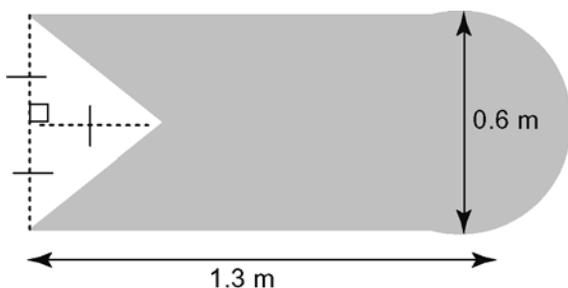


8. The parking lot of the local shopping mall needs to be coated with sealant.



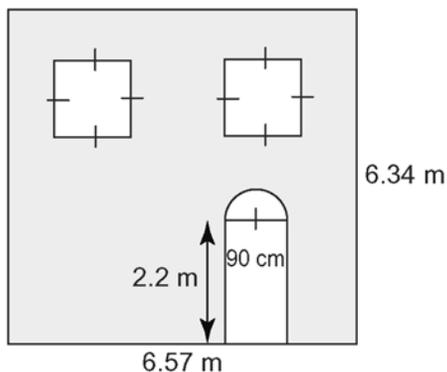
- What is the area of the parking lot?
- One 19-L pail of sealant covers an approximate area of  $2100 \text{ m}^2$ . How many pails of sealant are needed to apply two coats of sealant to the parking lot?

9. Lin designs kitchens for a home renovation company. She has designed a counter top to fit around a pipe attached to a wall.



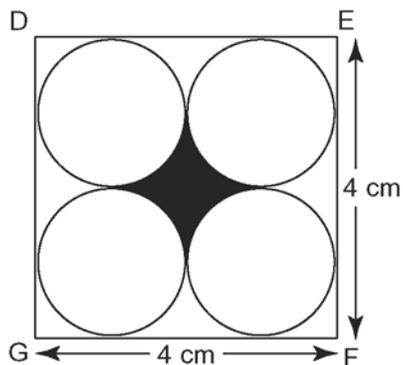
- Determine the area of the counter top to the nearest square centimetre.
- Small mosaic tiles cost  $\$0.37$  for  $10 \text{ cm}^2$ . How much will it cost to cover the counter top with mosaic tiles?

10. Pascal wants to paint the front of his house. His front door is 2.2 m in height.



- Calculate the area of the front of the house, not including the windows or door, to the nearest hundredth of a square metre.
- Paint costs  $\$25.99$  for a 2.75 L can and covers approximately  $30 \text{ m}^2$ . If Pascal applies two coats of paint, how many cans of paint will he need? How much will the paint cost?

11. The four circles are congruent and figure DEFG is a square with side lengths of 4 cm.



- Determine the area of the shaded region. Write your answer in terms of  $\pi$ .
- Calculate the area of the shaded region, to the nearest tenth of a square metre.

