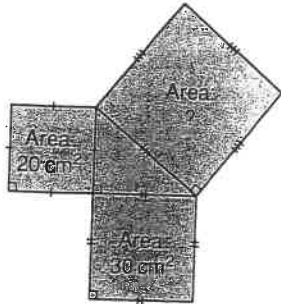


## Practice

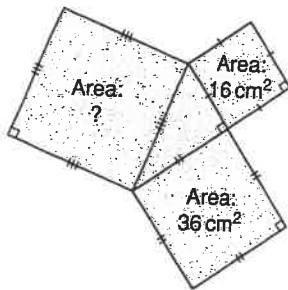
### Check

3. Find the area of the indicated square.

a)

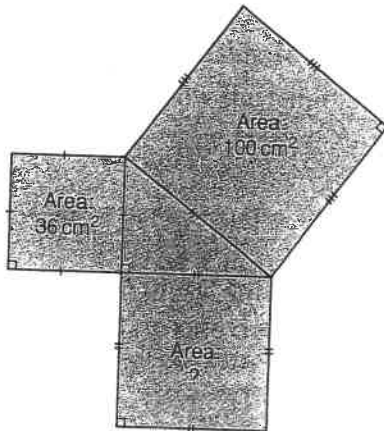


b)

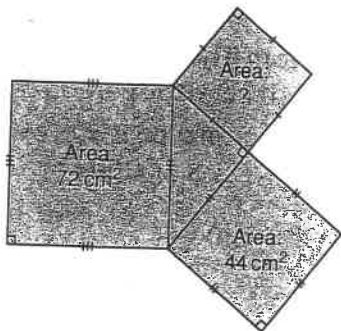


4. Find the area of the indicated square.

a)

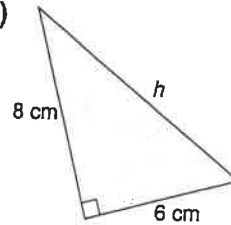


b)

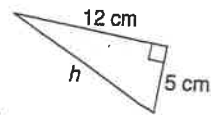


5. Find the length of each hypotenuse. Give your answers to one decimal place where needed.

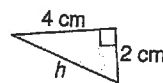
a)



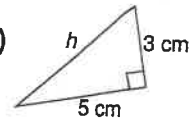
b)



c)

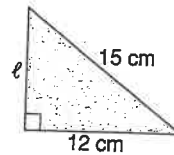


d)

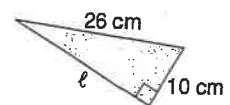


6. Find the length of each leg labelled  $\ell$ . Give your answers to one decimal place where needed.

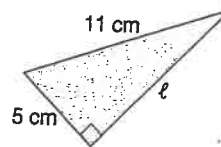
a)



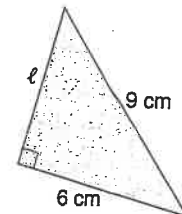
b)



c)



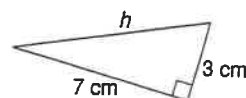
d)



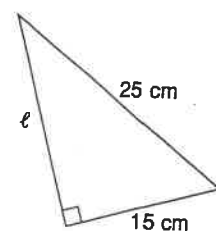
### Apply

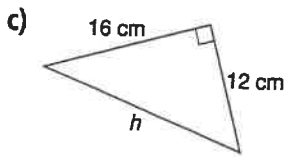
7. Find the length of each side labelled with a variable. Give your answers to one decimal place where needed.

a)

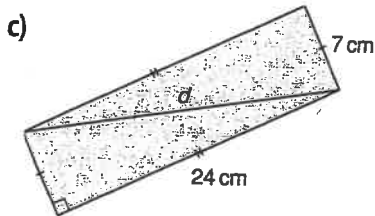
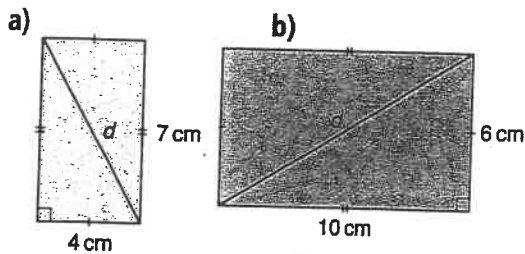


b)

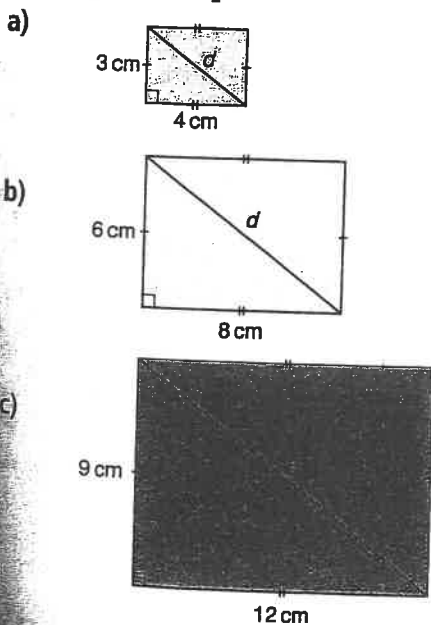




8. Find the length of the diagonal,  $d$ , in each rectangle.  
Give your answers to two decimal places where needed.

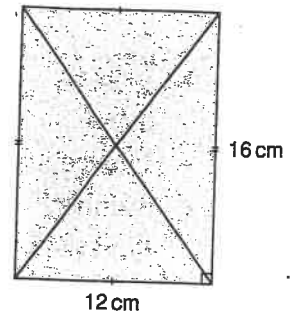


9. Find the length of the diagonal,  $d$ , in each rectangle.  
What patterns do you notice?  
Write to explain.  
Use your patterns to draw the next rectangle in the pattern.



10. Suppose you are given the side lengths of a right triangle.  
Which length is the length of the hypotenuse?  
Explain how you know.

11. Use the rectangle on the right. Explain why the diagonals of a rectangle have the same length.



12. **Assessment Focus** The hypotenuse of a right triangle is  $\sqrt{18}$  units.  
What are the lengths of the legs of the triangle?  
How many different answers can you find?  
Sketch a triangle for each answer.  
Explain your strategies.

13. Find the length of each side labelled with a variable.

