

## Homework Problems #'s 11-15

The points  $(3, 3)$  and  $(2, 6)$  are two vertices of a right triangle. Use this information for Exercises 11-13.

11. **Multiple Choice** Which point could be the third vertex of the right triangle?
- A.  $(3, 2)$                       B.  $(-1, 5)$                       C.  $(7, 4)$                       D.  $(0, 3)$
12. Give the coordinates of at least two other points that could be the third vertex.
13. How many right triangles with vertices  $(3, 3)$  and  $(2, 6)$  can you draw? Explain.
14. Can you connect the following points to form a parallelogram? Explain.  
 $(1, 1)$                        $(2, -2)$                        $(4, 2)$                        $(3, 5)$
15. Find the areas of triangles  $AST$ ,  $BST$ ,  $CST$ , and  $DST$ . How do the areas compare? Why do you think this is true?

