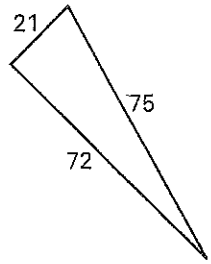
LESSON 9.3

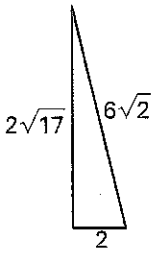
NAME _____ DATE _____

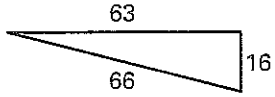
Practice C

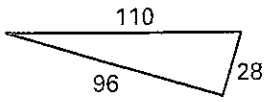
For use with pages 543–549

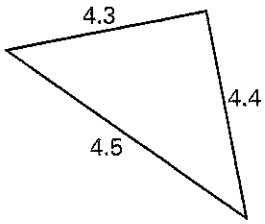
Tell whether the triangle is a right triangle.

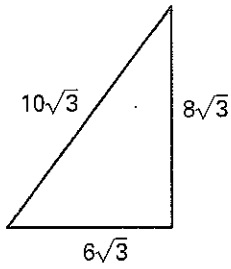
1. 

2. 

3. 

4. 

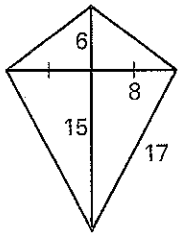
5. 

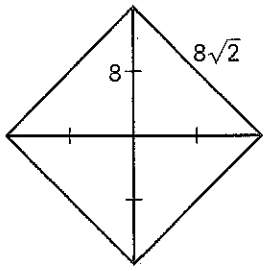
6. 

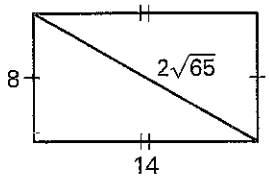
Decide whether the numbers can represent the side lengths of a triangle. If they can, classify the triangle as *right*, *acute*, or *obtuse*.

7. $7, \sqrt{5}, 3\sqrt{6}$
8. $8, 12, 18$
9. $6, \sqrt{15}, 5\sqrt{2}$
10. $7, 11, 20$
11. $5, 7, \sqrt{74}$
12. $21, 72, 75$

Classify the quadrilateral. Explain how you can prove that the quadrilateral is that type.

13. 

14. 

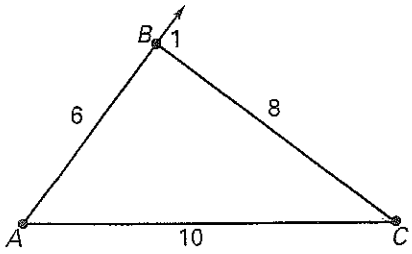
15. 

16. Quadrilateral $QUAD$ has vertices at $Q = (-5, 2)$, $U = (-1, 7)$, $A = (4, 3)$, and $D = (0, -2)$. Plot the figure and indicate what type of quadrilateral $QUAD$ is. Find the perimeter of $QUAD$.

Write a two-column proof or a paragraph proof.

17. **Given:** $AB = 6$, $BC = 8$, $AC = 10$

Prove: $\angle 1$ is a right angle



18. **Given:** $XZ = 3$, $ZY = 6$, $KY = 8$

Prove: $\angle 2$ is obtuse