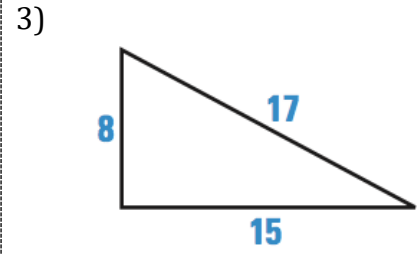
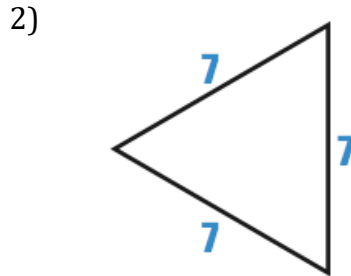
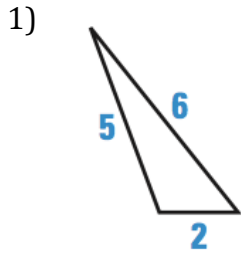


LEVEL: EMERGING

Directions: Determine if the given sides form a triangle.



Triangle (circle one)?    Yes    No  
 If so, classify: \_\_\_\_\_

Triangle (circle one)?    Yes    No  
 If so, classify: \_\_\_\_\_

Triangle (circle one)?    Yes    No  
 If so, classify: \_\_\_\_\_

LEVEL: PROFICIENT

Directions: Determine if the given sides form a triangle.

4) 6, 7, 4

5) 12, 37, 35

6) 2, 6, 10

Triangle (circle one)?    Yes    No  
 If so, classify: \_\_\_\_\_

Triangle (circle one)?    Yes    No  
 If so, classify: \_\_\_\_\_

Triangle (circle one)?    Yes    No  
 If so, classify: \_\_\_\_\_

7) 3, 4,  $4\sqrt{2}$

8) 7, 11, 18

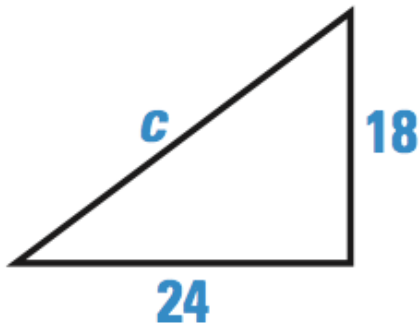
9) 8, 5, 10

Triangle (circle one)?    Yes    No  
 If so, classify: \_\_\_\_\_

Triangle (circle one)?    Yes    No  
 If so, classify: \_\_\_\_\_

Triangle (circle one)?    Yes    No  
 If so, classify: \_\_\_\_\_

10) Find a value for  $c$  so that the triangle to the right is each of the following triangles.



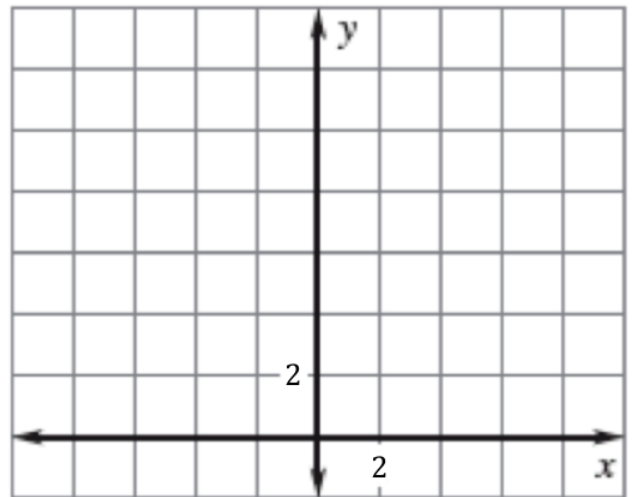
a) Acute

b) Right

c) Obtuse

Directions: Draw the triangle with the given vertices. Then determine if the triangle is acute, right, or

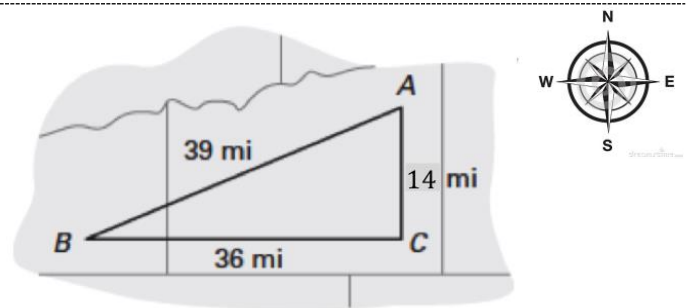
11)  $A(3, 1)$  ,  $B(0, 5)$  ,  $C(-8, -1)$



$AB =$  \_\_\_\_\_  $BC =$  \_\_\_\_\_  $CA =$  \_\_\_\_\_

(Circle one) Acute      Right      Obtuse

12) The distances between three towns are given in the diagram. Town B is directly west of Town C. Where is Town A in comparison to Town C?



- A) Directly north of Town C
- B) Northwest of Town C
- C) Northeast of Town C