

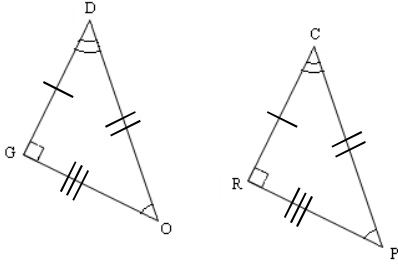
# 11.1H Distance and Triangle Symbols

Name: \_\_\_\_\_ Per: \_\_\_\_\_

SHOW YOUR WORK AND WORK IN PENCIL

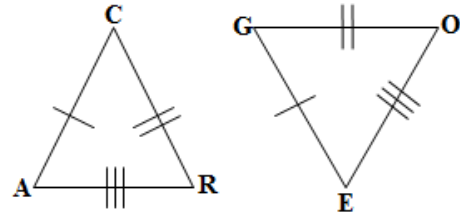
1. Write a congruency statement for the two triangles. Then list the congruent sides and angles.

a.  $\triangle OGD \cong \triangle$  \_\_\_\_\_



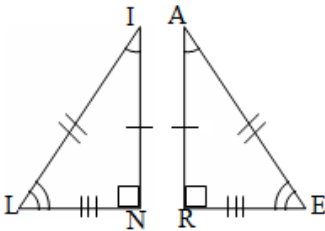
$\angle D \cong \angle$  \_\_\_\_\_     $\angle G \cong \angle$  \_\_\_\_\_     $\angle O \cong \angle$  \_\_\_\_\_  
 $GO \cong$  \_\_\_\_\_     $DO \cong$  \_\_\_\_\_     $GD \cong$  \_\_\_\_\_

b.  $\triangle RAC \cong \triangle$  \_\_\_\_\_



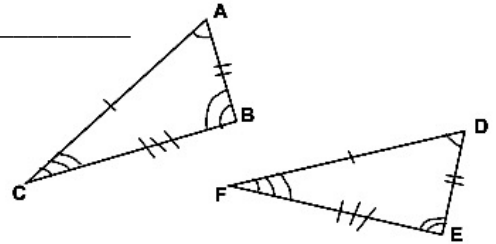
$\angle C \cong \angle$  \_\_\_\_\_     $\angle A \cong \angle$  \_\_\_\_\_     $\angle R \cong \angle$  \_\_\_\_\_  
 $AR \cong$  \_\_\_\_\_     $RC \cong$  \_\_\_\_\_     $AC \cong$  \_\_\_\_\_

c.  $\triangle LIN \cong \triangle$  \_\_\_\_\_



$\angle R \cong \angle$  \_\_\_\_\_     $\angle E \cong \angle$  \_\_\_\_\_     $\angle A \cong \angle$  \_\_\_\_\_  
 $RE \cong$  \_\_\_\_\_     $AR \cong$  \_\_\_\_\_     $AE \cong$  \_\_\_\_\_

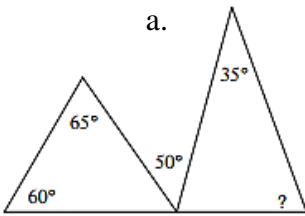
d.  $\triangle ABC \cong \triangle$  \_\_\_\_\_



$\angle B \cong \angle$  \_\_\_\_\_     $\angle A \cong \angle$  \_\_\_\_\_     $\angle C \cong \angle$  \_\_\_\_\_  
 $BC \cong$  \_\_\_\_\_     $AB \cong$  \_\_\_\_\_     $AC \cong$  \_\_\_\_\_

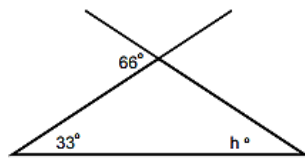
2. Find the measure of the indicate angle from the following images.

a.



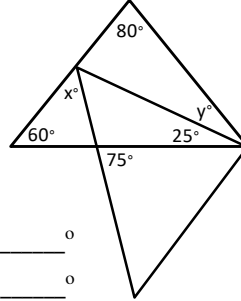
$\angle ? =$  \_\_\_\_\_ $^\circ$

b.



$\angle h =$  \_\_\_\_\_ $^\circ$

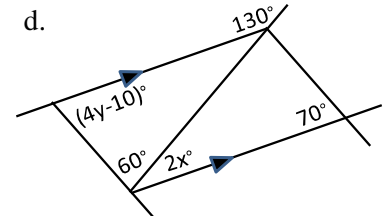
c.



$\angle x =$  \_\_\_\_\_ $^\circ$

$\angle y =$  \_\_\_\_\_ $^\circ$

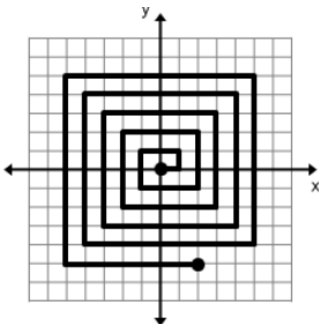
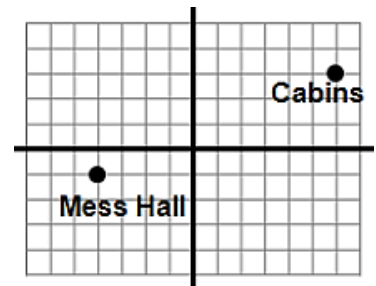
d.



$x =$  \_\_\_\_\_ $^\circ$

$y =$  \_\_\_\_\_ $^\circ$

3. Troop 263 is designing their new campground by first mapping everything on a coordinate grid. They have found a location for the mess hall and for their cabins. They decide to make one unit on the graph correspond to 3 yards. How many yards apart are the mess hall and the cabins?

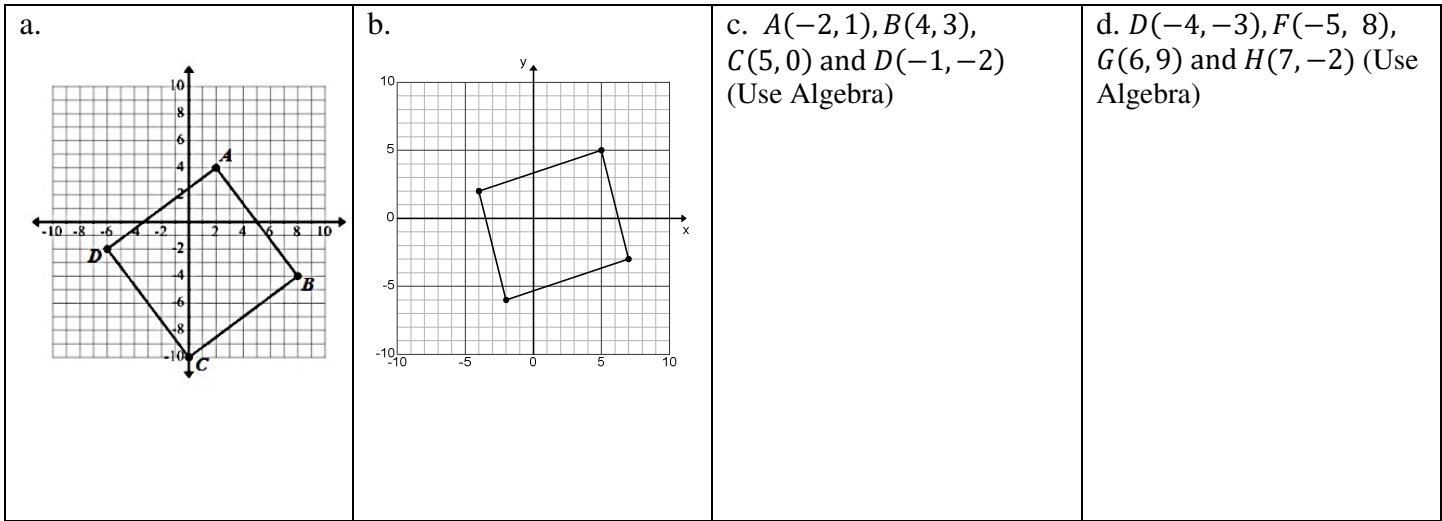


4. Katrina traces out the spiral shown in the figure to the left. The spiral begins at the origin.

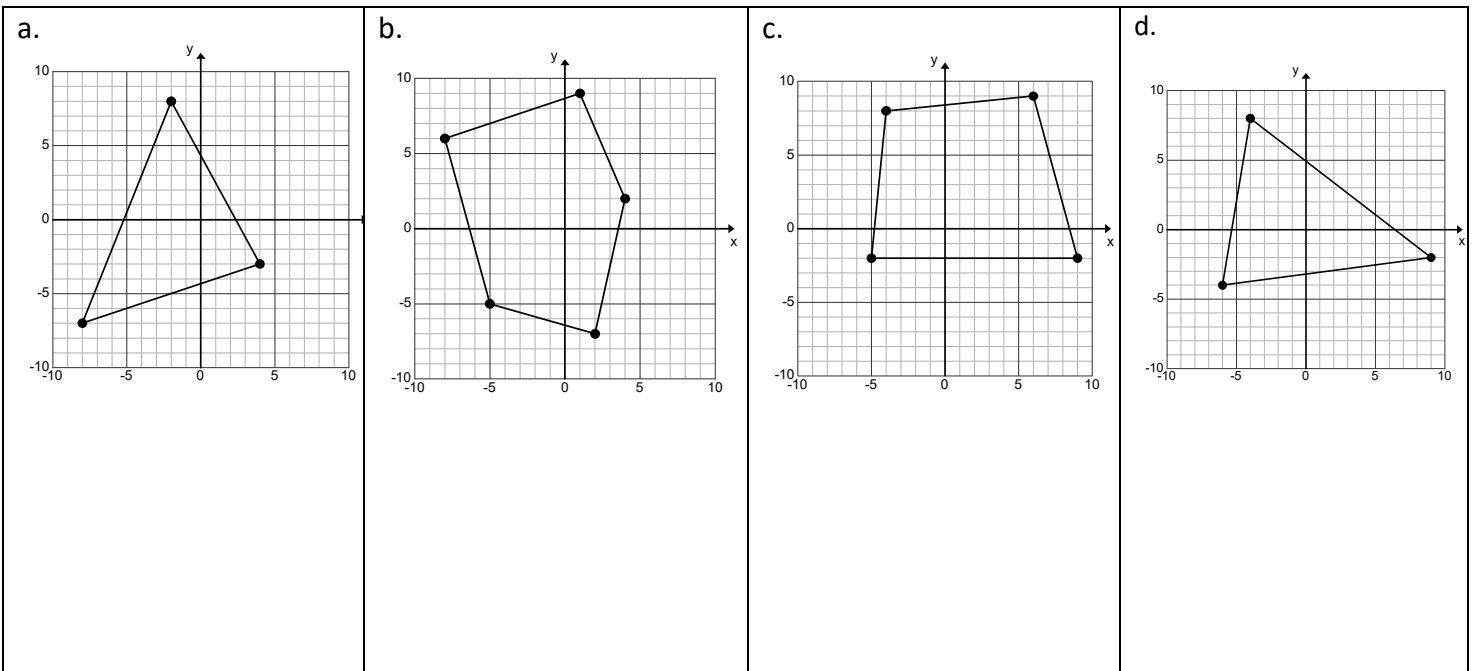
A. What is the total distance (in units) is her spiral?

B. What is the shortest distance between her starting point and her ending point?

5. Name the polygon and tell how you know. Mark parallel, perpendicular, and congruent with proper symbols.



6. Calculate the **PERIMETER AND AREA** of the following polygons. **SYW**. Round to the nearest 10<sup>th</sup>.



7. You earn \$600 from your job and decide to invest it with an 8.5% **interest** rate that compounds annually. How much money will you have in your account after three years? \_\_\_\_\_  
How much will you have in 10 years? \_\_\_\_\_

8. If  $l \parallel m$  and angle 14 and angle 4 are \_\_\_\_\_ angles and their measures **could** be . . .

- Alternate Exterior;  $\angle 4 = 57^\circ, \angle 14 = 123^\circ$
- Alternate Corresponding  $\angle 4 = 57^\circ, \angle 14 = 57^\circ$
- Alternate Reversal;  $\angle 4 = 57^\circ, \angle 14 = 123^\circ$
- No relationship;  $\angle 4 = 57^\circ, \angle 14 = 123^\circ$

