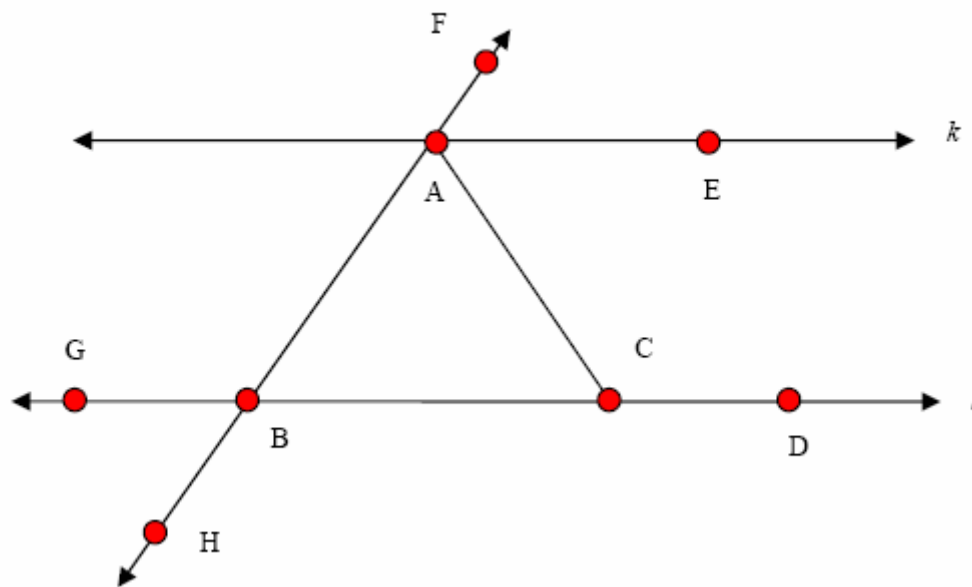# Pre-Test
Geometry

1. How many points determine a plane?

2. Determine the distance between points A (-1, 4) and B (2, 8). Show your work.

3. What is the general formula for finding the midpoint of a line segment?

4. We say that two angles are supplementary if and only if

5. List at least four methods for determining whether two triangles are congruent.

6. What is the relationship between the alternate angles which are formed when two parallel lines are cut by a transversal?

7. Congruent triangles have the same area. Give an example of triangles that have the equal area but are not congruent.

8. The lines k and l are parallel in the figure below.

$m\angle GBH = 70^0$ and $m\angle EAC = 40^0$.
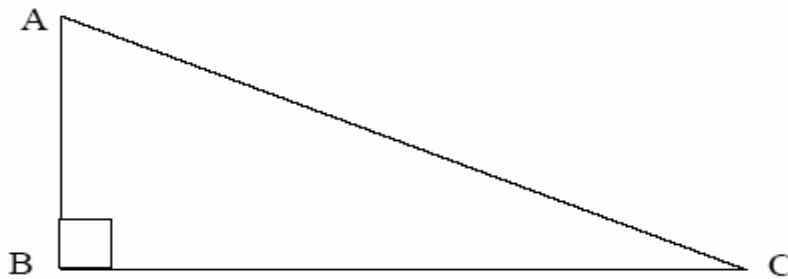Determine the measure of angle $\angle FAE$. Justify your conclusion.

9. Two triangles are similar if and only if….

10. What can be said about the point of intersection of the diagonals of a

Parallelogram?

11. How does each of the following transformation affect the area of a triangle?
a. Dilation
b. Reflection
c. Translation
d. Rotation

12. The right triangle ABC is shown below.

Given: $\overline{AC} = 4; m\angle C = 30^0$. Determine $\overline{AB}$ & $\overline{BC}$.