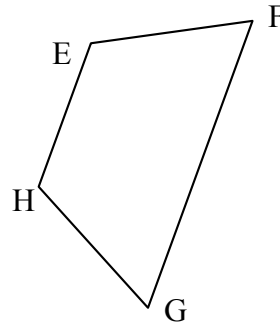
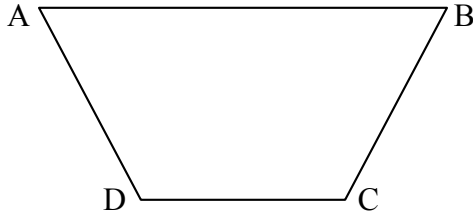


Assessment

Use valid forms of spatial and proportional reasoning to answer the following question:

1. The figures below are similar.



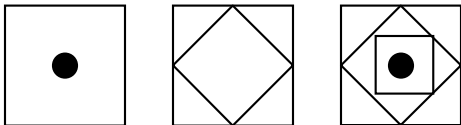
- a. Name the pairs of corresponding sides.
- b. Name the pairs of corresponding angles.

Use what you know about number systems and deductive reasoning to answer the following questions:

2. If you used the rule $(6x, 6y)$ to transform the original figure into a new figure, how would the angles of the new figure compare to the angles in the original figure? How would the side lengths compare?
3. If you used the rule $(\frac{1}{2}x, \frac{1}{2}y)$ to transform the original figure, how would the angles compare? How would the side lengths compare?
4. If you used the rule $(1.5x, 3.5y)$ to transform the original figure, how would the angles compare? How would the side lengths compare?

Use inductive reasoning to answer the following:

5. Draw the next figure in the pattern:



Use proportional reasoning to answer the following questions:

6. Below is a map of Ecuador and Peru. The scale for the map is 1 centimeter = 320 kilometers. This means that 1 centimeter on the map represents 320 kilometers in the real world. Using this scale and a ruler, estimate these distances:
 - a. From Quito to Yanachocha
 - b. From Cajamarca to Lima



(from Google Images)

Explain the invalid reasoning used in the following problem:

7. Anyone who lives in the city of Honolulu, HI also lives on the island of Oahu. Monae lives on the island of Oahu. Therefore Monae lives in the city of Honolulu, HI.