

Name _____

Date _____

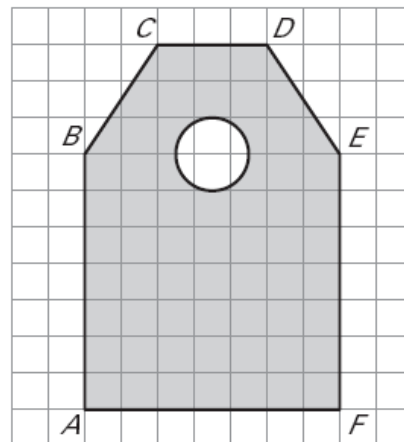
Open-ended Task: Geometry Chapter 1

Directions:

To receive full credit you must do the following:

1. Show OR describe each step of your work, even if you did it in your head (“mental math”) or used a calculator,
AND
2. Write an explanation stating the mathematical reason(s) why you chose each of your steps.

Question: A company that makes craft supplies is designing a metal tag that is used in crafting projects such as making scrapbooks. The tag is shown below. Assume the coordinates of point A are (0,0).



A. The tag is a polygon. Classify the polygon by the number of sides.

B. The center of the tag's hole is located midway between point B and point E.
What are the coordinates of the center of the hole?

C. Find the perimeter of the tag

D. Find the area of the hole.

E. Find the circumference of the hole.