Name: _____

1.7 – PERIMETER & AREA ON THE COORDINATE PLANE   Past due on: _____   Period: _____

ALL WORK MUST BE SHOWN TO RECEIVE CREDIT.

1. Translate rectangle *WXYZ* such that one vertex of the image is located at the origin and label the vertices of the translated image. Calculate the perimeter and area of the image. Round your answer to the nearest hundredth, if necessary.
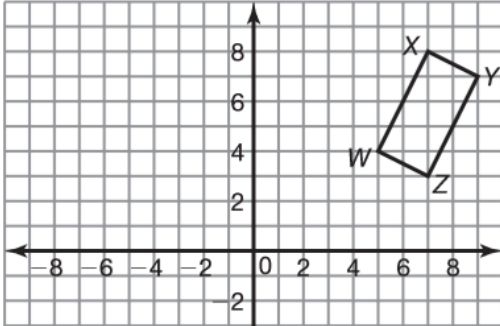
2. Use the boxing method to find the area of trapezoid *QRST*. Calculate the perimeter and area of the image. Round your answer to the nearest hundredth, if necessary.
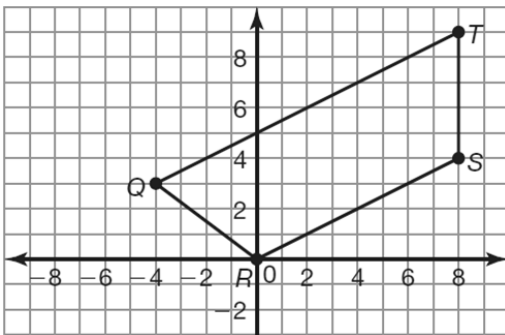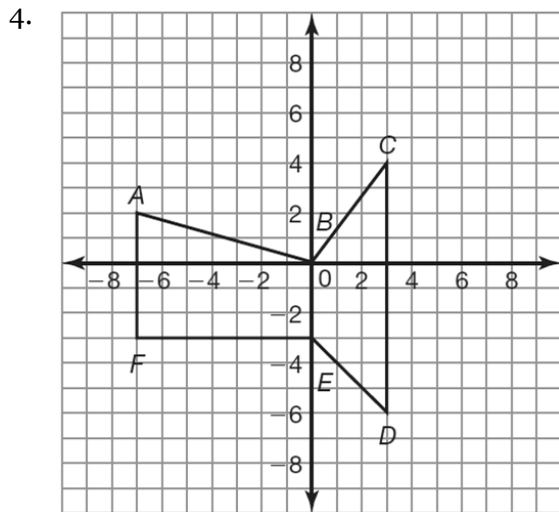

3. Joseph plans to fence in a corner of his property so his dog can exercise there. Consider the triangular space shown. Each of the three corners of the space is labeled with coordinates and helps define the dimensions, in feet, of the fenced portion of the land.
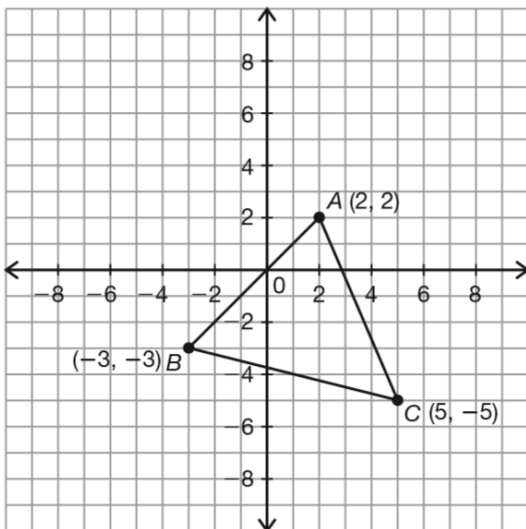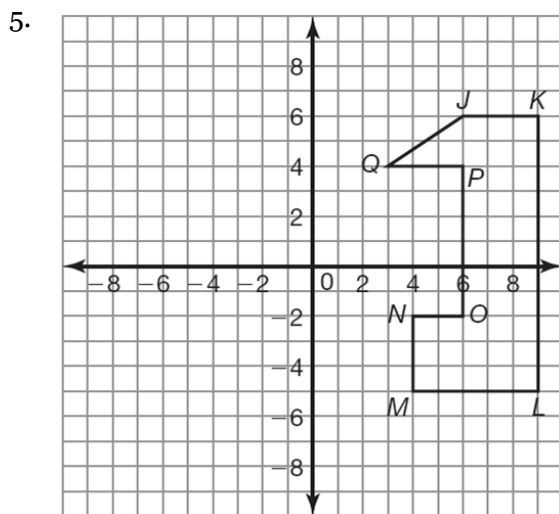

   a. Fencing costs $15 per linear foot. How much will this project cost Joseph? Explain your reasoning.

   b. Calculate the amount of space Joseph's dog will have to exercise. Use the boxing method and show your work.

Determine the perimeter <u>and</u> the area of each composite figure. Round your answers to the nearest hundredth, if necessary.
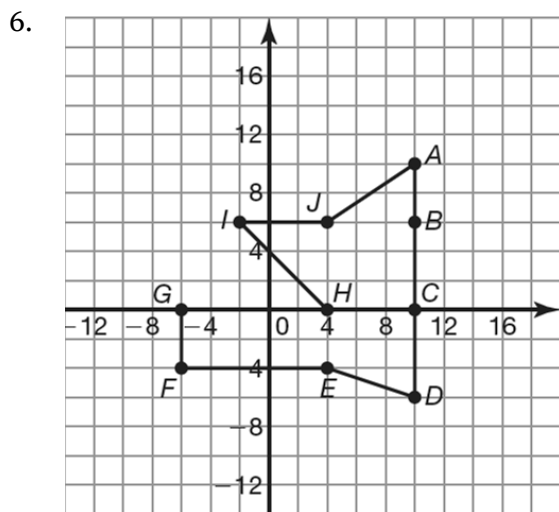
4.

$AB =$ _____ $BC =$ _____ $CD =$ _____

$DE =$ _____ $EF =$ _____ $AF =$ _____

Perimeter: _____   Area: _____

5.

$JK =$ _____ $KL =$ _____ $LM =$ _____

$MN =$ _____ $NO =$ _____ $OP =$ _____

$PQ =$ _____ $JQ =$ _____

Perimeter: _____   Area: _____

6.

$AD =$ _____ $DE =$ _____ $EF =$ _____

$FG =$ _____ $GH =$ _____ $HI =$ _____

$IJ =$ _____ $AJ =$ _____

Perimeter: _____   Area: _____

Chapter 1: The Tools of Geometry