

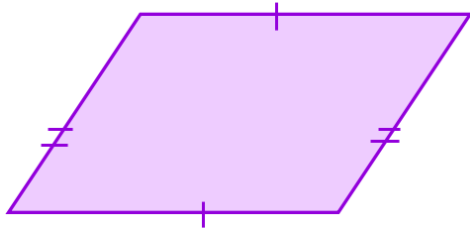
Name: _____
Date: _____

School: _____
Facilitator: _____

7.01 Polygons

Total Points: 47

Answer the questions below for each image.



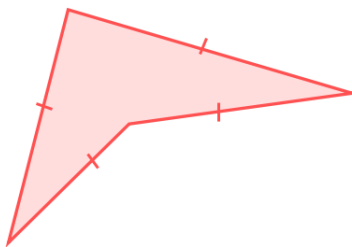
1. Is this figure a polygon? _____

Answer the questions below only if the figure is a polygon.

1a. Is this polygon concave or convex? _____

1b. Is this polygon regular, equiangular, equilateral, or none of these? _____

1c. What is the name of this polygon? _____



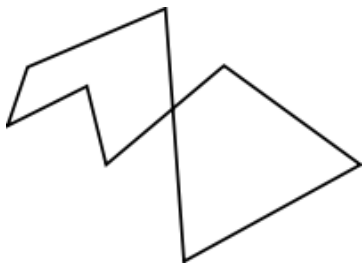
2. Is this figure a polygon? _____

Answer the questions below only if the figure is a polygon.

1a. Is this polygon concave or convex? _____

1b. Is this polygon regular, equiangular, equilateral, or none of these? _____

1c. What is the name of this polygon? _____



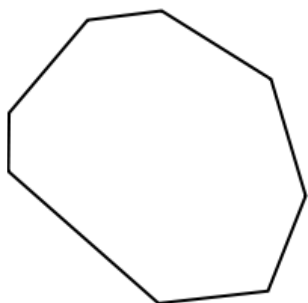
3. Is this figure a polygon? _____

Answer the questions below only if the figure is a polygon.

1a. Is this polygon concave or convex? _____

1b. Is this polygon regular, equiangular, equilateral, or none of these? _____

1c. What is the name of this polygon? _____



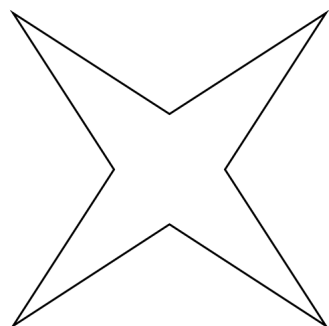
4. Is this figure a polygon? _____

Answer the questions below only if the figure is a polygon.

1a. Is this polygon concave or convex? _____

1b. Is this polygon regular, equiangular, equilateral, or none of these? _____

1c. What is the name of this polygon? _____



All sides are congruent.

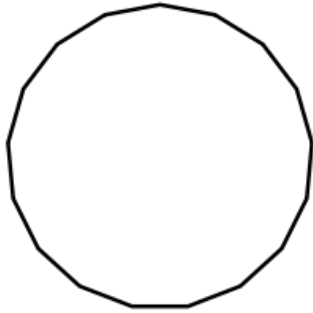
5. Is this figure a polygon? _____

Answer the questions below only if the figure is a polygon.

1a. Is this polygon concave or convex? _____

1b. Is this polygon regular, equiangular, equilateral, or none of these? _____

1c. What is the name of this polygon? _____



All sides and angles are congruent.

6. Is this figure a polygon? _____

Answer the questions below only if the figure is a polygon.

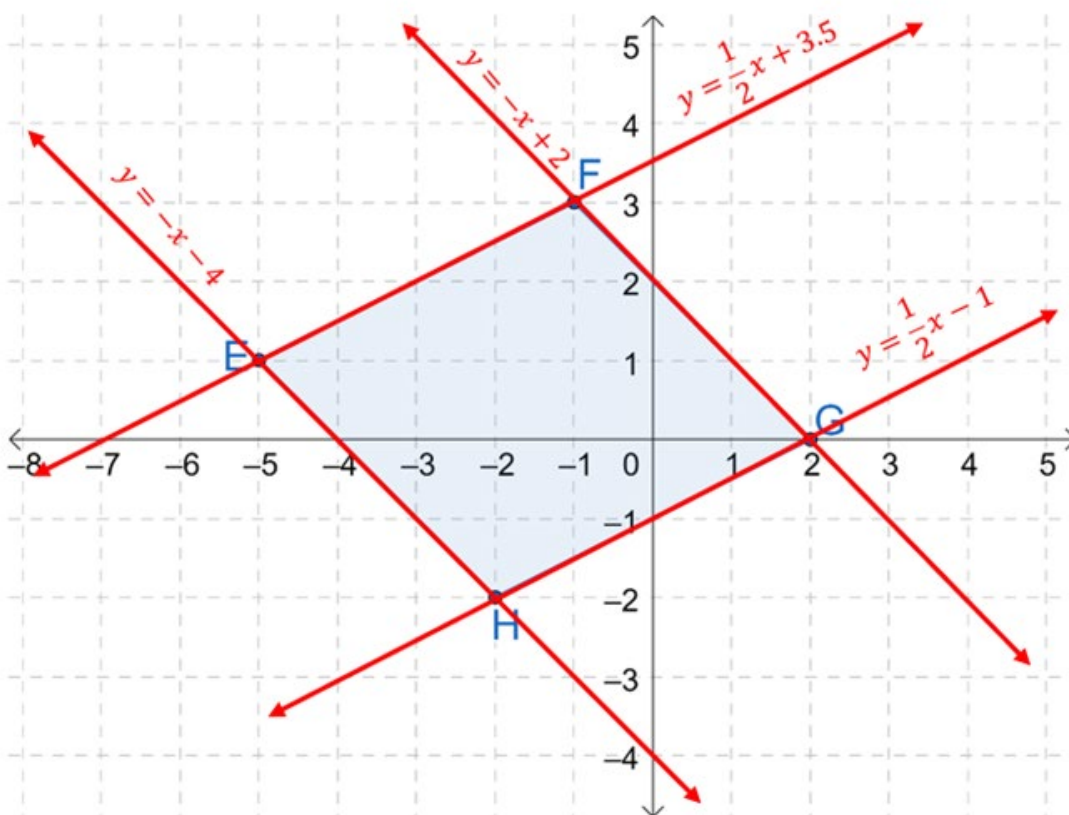
1a. Is this polygon concave or convex? _____

1b. Is this polygon regular, equiangular, equilateral, or none of these? _____

1c. What is the name of this polygon? _____

7. Identify which of these terms do not belong with the other three: square, circle, hexagon, or triangle. Explain your reasoning. _____

8. What are the coordinates of the vertices of the polygon formed by the lines in the diagram?



Coordinates: _____, _____, _____, and _____.

9. Find the coordinates of the vertices of the triangle formed by the lines: $y = 8x - 3$, $y = 2x - 3$, and $y = -x + 6$. Show your work in the spaces provided.

The intersection of lines $y = 8x - 3$ and $y = 2x - 3$ is _____.

Show your work here:

The intersection of lines $y = 8x - 3$ and $y = -x + 6$ is _____.

Show your work here:

The intersection of lines $y = 2x - 3$ and $y = -x + 6$ is _____.

Show your work here:

The coordinates of the vertices of the triangle are: _____, _____, and _____.

10. Use the link on the task page to find the coordinates of the vertices of the triangle formed by the lines: $y = -\frac{1}{4}x + 3$, $y = -\frac{3}{2}x + 3$, and $y = x - 2$. Copy and paste the graph in the space provided below. Then, answer the problems that follow.

Graph:

The intersection of lines $y = -\frac{1}{4}x + 3$ and $y = -\frac{3}{2}x + 3$ is _____.

The intersection of lines $y = -\frac{1}{4}x + 3$ and $y = x - 2$ is _____.

The intersection of lines $y = -\frac{3}{2}x + 3$ and $y = x - 2$ is _____.

The coordinates of the vertices of the triangle are: _____, _____, and _____.