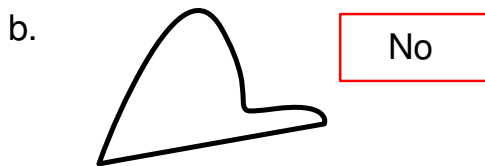
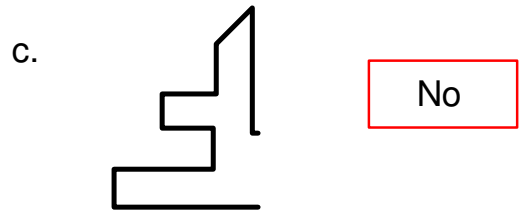
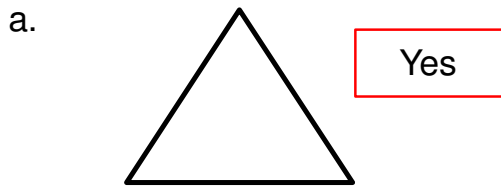
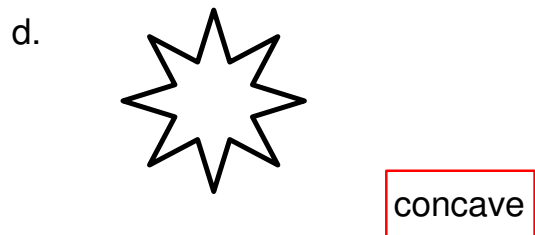
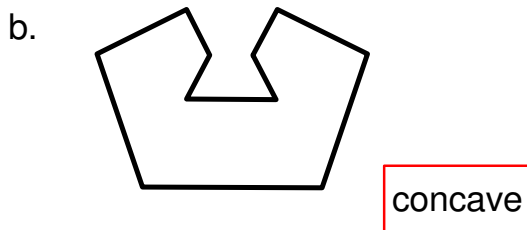
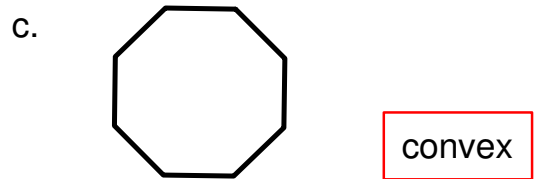
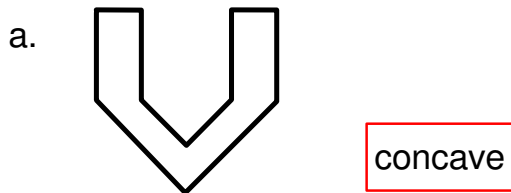


Vocabulary

1. Evaluate if each of the following figures is a polygon or not. by writing "Yes" or "No".



2. Evaluate if each of the given polygons is concave or convex.



3. Provide the number of sides for each polygon in the following:

a. pentagon:

c. decagon:

b. heptagon:

d. 13-gon :

4. Provide the name for polygon that has the following number of sides:

a. 7: heptagon

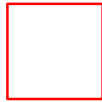
c. 12: dodecagon

b. 14: 14 - gon

d. 6: hexagon

5. Draw the following polygons:

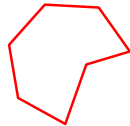
a. a convex quadrilateral



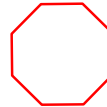
c. a concave pentagon



b. a concave heptagon

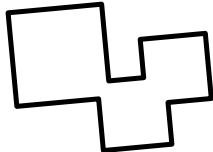


d. a convex octagon

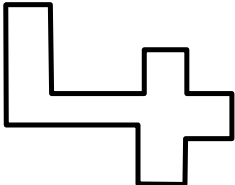


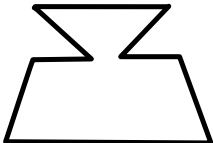
6. Provide the name for polygons in the following as convex or concave, name them based on the number of sides it has.

(Example: "a convex quadrilateral")

a.  concave dodecagon

c.  concave hexagon

b.  concave 14 - gon

d.  concave octagon

7. Fill out the following statements with the word *always*, *sometimes*, or *never*.

a. Triangle is always convex.

b. A heptagon polygon never has 6 sides.

c. A convex polygon is always less than or equal to 180° .

d. A star shape polygon is always a concave polygon.

8. Fill out the statements in the following with the word *always*, *sometimes*, or *never*.

- a. An octagon never has 7 sides.
- b. A concave polygon has always at least one interior angle $> 180^\circ$.
- c. A nonagon always has 9 sides.
- d. A polygon never has a curve.

9. Write object from your real life that represents each of the following polygons:

Example: quadrilateral - *a piece of paper*

- a. Quadrilateral - A sheet of paper
- b. Pentagon - A paper weight stone have five sides
- c. Octagon - A cell phone usually has 8 sides
- d. Nonagon - A star can have 9 sides

10. Provide the name for polygon that best describe each of the following, if possible: Example: the state of Colorado - *quadrilateral*

- a. a "Tennis Ball" - not a polygon
- b. A "Picture Frame" - quadrilateral
- c. a "Door" - quadrilateral
- d. a compact disc - not a polygon