



**PUBLIC SCHOOL DARBHANGA**  
**SESSION ( 2020-21)**  
**CLASS-VI**  
**MATHEMATICS**  
**BASIC GEOMETRIC IDEAS**

**1. Classify the following curves as (i) Open or (ii) Closed**



(a)



(b)



(c)



(d)



(e)

**2. Draw rough diagrams to illustrate the following:**

(a) Open curve

(b) Closed curve

**3. Draw any polygon and shade its interior.**

**4. Consider the given figure and answer the questions:**

(a) Is it a curve?

(b) Is it closed?

**5. Illustrate, if possible, each one of the following with a rough diagram:**

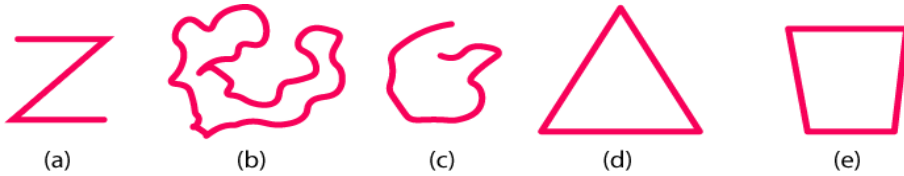
(a) A closed curve that is not a polygon.

(b) An open curve made up entirely of line segments.

(c) A polygon with two sides.

**ANSWER KEY**

**1. Classify the following curves as (i) Open or (ii) Closed**



**Solutions:**

- (a) The given curve is an open curve
- (b) The given curve is closed curve
- (c) The given curve is open curve
- (d) The given curve is closed curve
- (e) The given curve is closed curve

**2. Draw rough diagrams to illustrate the following:**

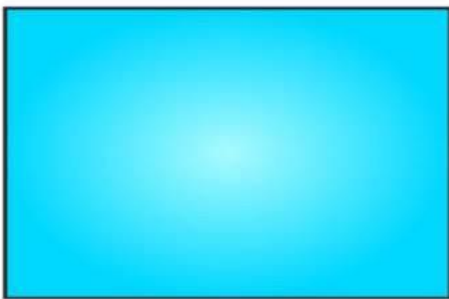
- (a) Open curve
- (b) Closed curve

**Solutions**

- (a) The below figure is the open curve



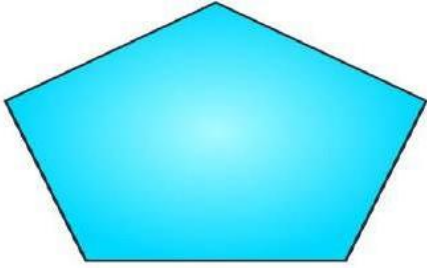
- (b) The below figure is the closed curve



**3. Draw any polygon and shade its interior.**

**Solutions:**

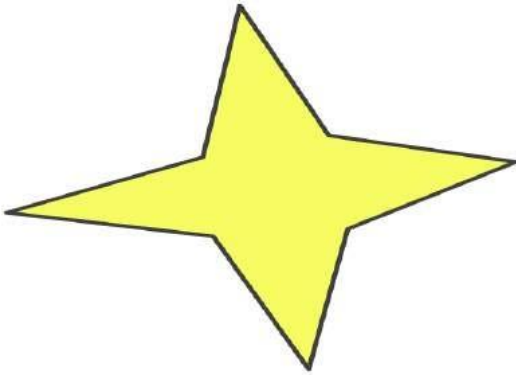
The below figure is the polygon with interior shade



**4. Consider the given figure and answer the questions:**

**(a) Is it a curve?**

**(b) Is it closed?**



**Solutions:**

**(a)** Yes, it is a curve

**(b)** Yes, it is closed curve

**5. Illustrate, if possible, each one of the following with a rough diagram:**

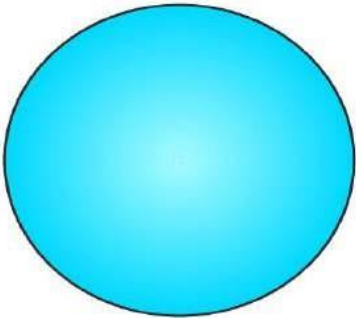
**(a) A closed curve that is not a polygon.**

**(b) An open curve made up entirely of line segments.**

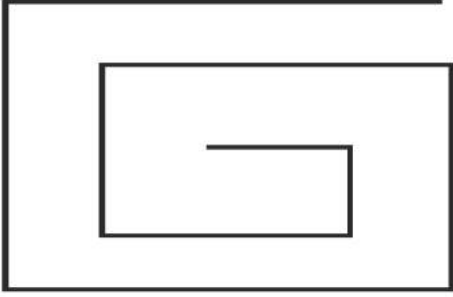
**(c) A polygon with two sides.**

**Solutions:**

**(a)** The below figure is the closed figure but not a polygon



(b) The below figure is an open curve made up entirely of line segments



(c) No its not possible, as the polygon having least number of sides is a triangle which has three sides.