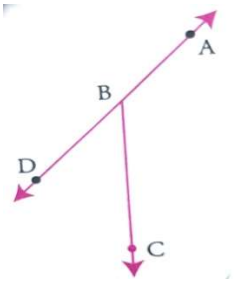
INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2024-25

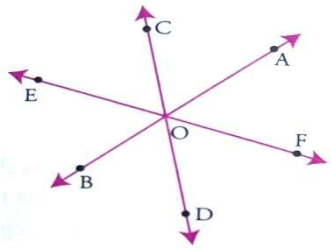
CLASS: VI SUBJECT: MATHEMATICS DATE: 18-06-2024

LESSON:04 – BASIC GEOMETRICAL IDEAS

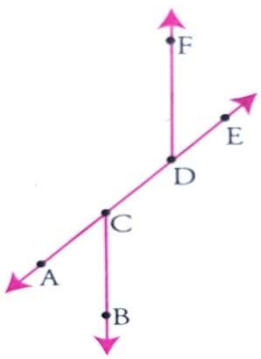
1. In the given figure, what do the following letters represent?
   a) A, B, C, D b) $\underset{BC}{\rightarrow}$ $\underset{BA}{\rightarrow}$ c) $\underset{AD}{\leftrightarrow}$



2. a) How many lines are drawn in the given figure? Name them.
   a) How many rays are there in the figure? Name them.



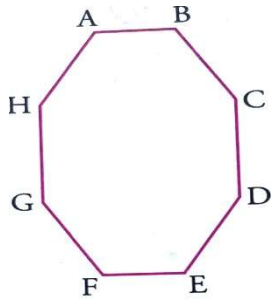
3. Using the given figure, name the following:
   b) Points b) Rays c) Lines d) Line segments



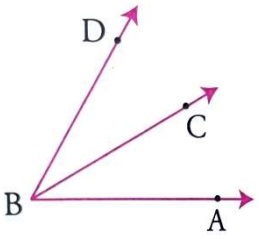
4. Draw a rough sketch and label the points correctly in each of the following:
   a) A point Z lies on AB.
   b) $\overleftrightarrow{MN}$ and $\overleftrightarrow{PQ}$ intersecting at O.
   c) Points A and B lying on PQ but C not lying on PQ.
5. Draw a rough sketch of the following:
   a) Open Curve b) Closed Curve

   c)Closed curve formed of straight-line segments.

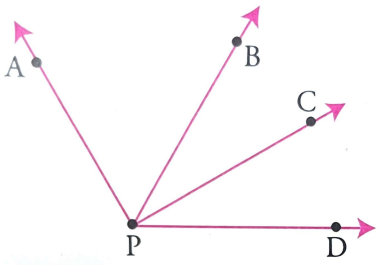
6. Draw all the diagonals of the given polygon. How many diagonals are there in total.



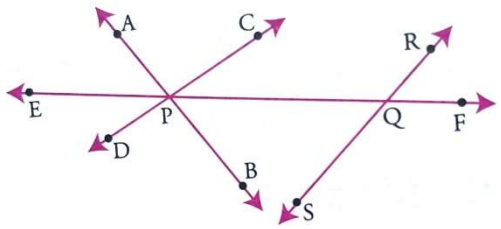
7. How many angles are there in the adjoining figure? Name all of them.



8. Name any two pairs of adjacent angles in the given figure:



9. Using the given figure, name the following.



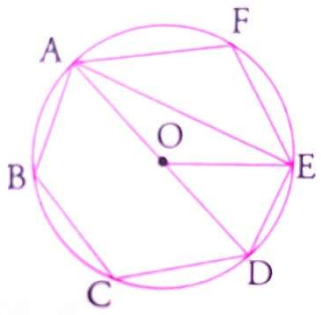
a) A line passing through P
b) Three pairs of intersecting lines
c) A line on which Q lies

10. Draw a rough sketch of a polygon with 7 sides and name it as ABCDEFG.

a) Mark points P and Q in the interior of polygon

b) Mark 2 points R and S in the exterior of the polygon
c) Name 2 pairs of adjacent sides of the polygon

11. Name (at least eight) different polygons that you can see in the given figure:



Answers:

1. a) points b) rays c) line
2. a) 3 lines, $\overleftrightarrow{AB}, \overleftrightarrow{CD}, \overleftrightarrow{EF}$ b) 6 rays, $\overrightarrow{OA}, \overrightarrow{OB}, \overrightarrow{OC}, \overrightarrow{OD}, \overrightarrow{OE}, \overrightarrow{OF}$
3. a) A, B, C, D, E, F b) $\overrightarrow{CA}, \overrightarrow{CB}, \overrightarrow{CE}, \overrightarrow{DF}$ c) $\overleftrightarrow{AE}$ d) AC, CD, DE

7. 3, ∠ABD, ∠ABC, ∠CBD 8. ∠APB & ∠BPC , ∠ BPC&∠CPD

9. a) $\overleftrightarrow{AB}$ b) $\overleftrightarrow{AB}$ & $\overleftrightarrow{CD}$, $\overleftrightarrow{EF}$ & $\overleftrightarrow{CD}$, $\overleftrightarrow{SR}$ & $\overleftrightarrow{EF}$ c) $\overleftrightarrow{SR}$

11. AFE, AOE, AFEO, DOE, AED, ABCD, AFED, AFEDCB

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