

LESSON

1

Geometric Figures

Practice A: Building Blocks of Geometry

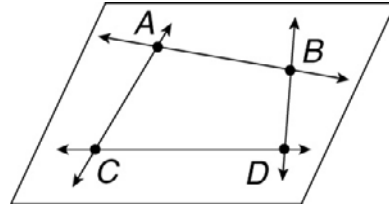
Write the following in geometric notation.

1. line EF _____ 2. ray RS _____ 3. line segment JK _____

Choose the letter for the best answer.

4. Identify a line.

- | | |
|------------------------|------------------------|
| A \overline{BD} | C $\leftrightarrow CB$ |
| B $\leftrightarrow AD$ | D $\leftrightarrow BD$ |



5. Identify a ray.

- | | |
|--------------------|------------------------|
| F $\rightarrow AC$ | H $\leftrightarrow CD$ |
| G \overline{AD} | J $\rightarrow CB$ |

6. Identify a line segment.

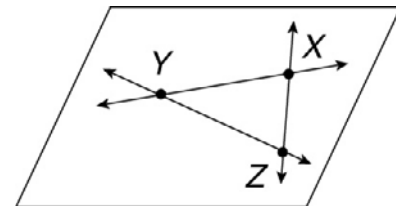
- | | |
|--------------------|-------------------|
| A $\rightarrow DB$ | C \overline{CB} |
| B \overline{DB} | D \overline{AD} |

7. Identify a plane.

- | | |
|---------------|---------------|
| F plane AB | H plane ABD |
| G plane ADE | J plane BCF |

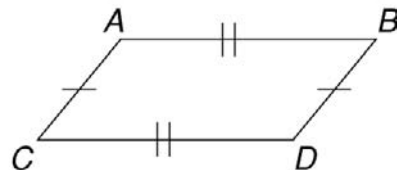
Identify the figures in the diagram.

8. two lines _____
9. three rays _____
10. three points _____
11. three line segments _____
12. a plane _____



Use the figure for Exercise 13.

13. Identify which line segments are congruent.



Geometric Figures

Answers for Lesson 1

Practice A

- \overleftrightarrow{EF}
- \overrightarrow{RS}
- \overline{JK}
- D
- F
- B
- H
- \overleftrightarrow{XY} , \overleftrightarrow{XZ} , \overleftrightarrow{YZ}
- \overrightarrow{XY} , \overrightarrow{YX} , \overrightarrow{XZ} , \overrightarrow{ZX} , \overrightarrow{YZ} , \overrightarrow{ZY}
- X, Y, Z
- \overline{XY} , \overline{XZ} , \overline{YZ}
- plane XYZ
- \overline{AB} and \overline{CD} ; \overline{AC} and \overline{BD}

Practice B

Possible answers:

- A, B, C, D
- \overleftrightarrow{BC}
- plane ABC
- \overrightarrow{BD} , \overrightarrow{CD} , \overrightarrow{CB} , \overrightarrow{BC}
- \overline{AB} , \overline{AC} , \overline{BD} , \overline{CD} , \overline{BC}

Possible answers:

- M, N, O, P
- \overleftrightarrow{MN} , \overleftrightarrow{MO} , \overleftrightarrow{NO}
- plane MNO
- \overrightarrow{MO} , \overrightarrow{MN} , \overrightarrow{NM} , \overrightarrow{NO} , \overrightarrow{OM} , \overrightarrow{ON} , \overrightarrow{OP}
- \overline{MN} , \overline{MO} , \overline{NO} , \overline{OP}

Possible answers:

- Q, R, S, T
- \overleftrightarrow{QS} , \overleftrightarrow{RT}
- plane QRS
- \overrightarrow{QS} , \overrightarrow{SQ} , \overrightarrow{RT} , \overrightarrow{TR}
- \overline{QR} , \overline{RS} , \overline{QS} , \overline{ST} , \overline{RT}
- \overline{AB} and \overline{DE} ; \overline{BC} and \overline{EF} ; \overline{AD} , \overline{BE} , and \overline{CF}

Practice C

- A, B, C, D, E, F
- \overleftrightarrow{BE}
- Possible answers:
plane ACE, plane BCD,
plane ABD, plane CEF
- \overrightarrow{CA} , \overrightarrow{DF} , \overrightarrow{BD} , \overrightarrow{EC} , \overrightarrow{BE} , \overrightarrow{EB} ,
 \overrightarrow{BA} , \overrightarrow{EF}
- \overline{AB} , \overline{BC} , \overline{AD} , \overline{DB} , \overline{BE} , \overline{EC} ,
 \overline{CF} , \overline{DE} , \overline{EF} , \overline{AC} , \overline{DF}
- A, B, C, D
- Possible answers:
plane ABC, plane BCD,
plane ACD, plane ABD

- \overrightarrow{AB} , \overrightarrow{BA} , \overrightarrow{BD} , \overrightarrow{DB} , \overrightarrow{CD} , \overrightarrow{DC} ,
 \overrightarrow{CA} , \overrightarrow{AC}
- \overline{AB} , \overline{BD} , \overline{DC} , \overline{CA}

Review for Mastery

- J, K, L, M, N
- \overleftrightarrow{JK} , \overleftrightarrow{KL} , \overleftrightarrow{JL}
- Possible answer: plane JMK
- \overrightarrow{LN} , \overrightarrow{JM} , \overrightarrow{JK} , \overrightarrow{KJ} , \overrightarrow{KL} , \overrightarrow{LK} , \overrightarrow{JL} , \overrightarrow{LJ}
- \overline{JK} , \overline{KL} , \overline{JL} , \overline{JM} , \overline{LN}
- $\overline{AE} \cong \overline{AC}$, $\overline{CD} \cong \overline{DE}$

Challenge

- Answers will vary.
Possible answer given.

