LESSON 8-1

Practice A

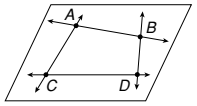
Building Blocks of Geometry

Write the following in geometric notation.

1. line EF $\overleftrightarrow{EF}$
2. ray RS $\overrightarrow{RS}$
3. line segment JK $\overline{JK}$

Choose the letter for the best answer.

4. Identify a line.
   A $\overline{BD}$ C $\overleftrightarrow{CB}$
   B $\overrightarrow{AD}$ (D) $\overleftrightarrow{BD}$



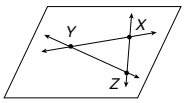
5. Identify a ray.
   (F) $\overrightarrow{AC}$ H $\overrightarrow{CD}$
   G $\overrightarrow{AD}$ J $\overrightarrow{CB}$

6. Identify a line segment.
   A $\overline{DB}$ 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

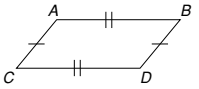
Identify the figures in the diagram. Possible Answers:

8. two lines $\overleftrightarrow{XY}$, $\overleftrightarrow{XZ}$, $\overleftrightarrow{YZ}$
9. three rays $\overrightarrow{XY}$, $\overrightarrow{YX}$, $\overrightarrow{XZ}$, $\overrightarrow{ZX}$, $\overrightarrow{YZ}$, $\overrightarrow{ZY}$
10. three points X, Y, Z
11. three line segments $\overline{XY}$, $\overline{XZ}$, $\overline{YZ}$
12. a plane plane XYZ



Use the figure for Exercise 13.

13. Identify which line segments are congruent.
    $\overline{AB}$ and $\overline{CD}$; $\overline{AC}$ and $\overline{BD}$



Copyright © by Holt, Rinehart and Winston. All rights reserved.

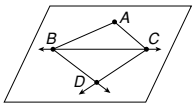
LESSON 8-1

Practice B

Building Blocks of Geometry

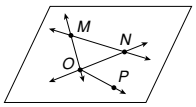
Identify the figures in the diagram. Possible answers:

1. three points A, B, C, D
2. one line $\overleftrightarrow{BC}$
3. a plane plane ABC
4. four rays $\overrightarrow{BD}$, $\overrightarrow{CD}$, $\overrightarrow{CB}$, $\overrightarrow{BC}$
5. three line segments $\overline{AB}$, $\overline{AC}$, $\overline{BD}$, $\overline{CD}$, $\overline{BC}$



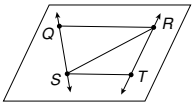
Identify the figures in the diagram. Possible answers:

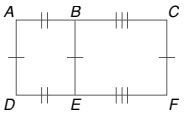
6. four points M, N, O, P
7. three lines $\overleftrightarrow{MN}$, $\overleftrightarrow{MO}$, $\overleftrightarrow{NO}$
8. a plane plane MNO
9. three rays $\overrightarrow{MO}$, $\overrightarrow{MN}$, $\overrightarrow{NM}$, $\overrightarrow{NO}$, $\overrightarrow{OM}$, $\overrightarrow{ON}$, $\overrightarrow{OP}$
10. four line segments $\overline{MN}$, $\overline{MO}$, $\overline{NO}$, $\overline{OP}$



Identify the figures in the diagram. Possible answers:

11. four points Q, R, S, T
12. two lines $\overleftrightarrow{QS}$, $\overleftrightarrow{RT}$
13. a plane plane QRS
14. four rays $\overrightarrow{QS}$, $\overrightarrow{SQ}$, $\overrightarrow{RT}$, $\overrightarrow{TR}$
15. five line segments $\overline{QR}$, $\overline{RS}$, $\overline{QS}$, $\overline{ST}$, $\overline{RT}$
16. Identify the line segments that are congruent in the figure.
    $\overline{AB}$ and $\overline{DE}$; $\overline{BC}$ and $\overline{EF}$;
    $\overline{AD}$, $\overline{BE}$, and $\overline{CF}$





Copyright © by Holt, Rinehart and Winston. All rights reserved.

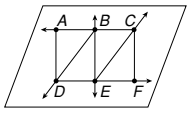
LESSON 8-1

Practice C

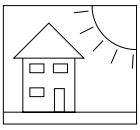
Building Blocks of Geometry

Identify the figures in the diagram.

1. six points A, B, C, D, E, F
2. a line $\overleftrightarrow{BE}$
3. planes (list 4 possible names) Possible answers:
   plane ACE, plane BCD,
   plane ABD, plane CEF
4. three rays $\overrightarrow{CA}$, $\overrightarrow{DF}$, $\overrightarrow{BD}$, $\overrightarrow{EC}$, $\overrightarrow{BE}$, $\overrightarrow{EB}$, $\overrightarrow{BA}$, $\overrightarrow{EF}$
5. five line segments $\overline{AB}$, $\overline{BC}$, $\overline{AD}$, $\overline{DB}$, $\overline{BE}$, $\overline{EC}$, $\overline{CF}$, $\overline{DE}$, $\overline{EF}$, $\overline{AC}$, $\overline{DF}$



Give examples of where each figure could be found in the picture.



6. points
   Possible answer: any corner of the house or of a window or door
7. planes
   Possible answer: the ground
8. rays
   Possible answer: the sunlight
9. line segments
   Possible answer: all of the line segments that make up the house
10. congruent line segments
    Possible answer: opposite sides of windows and door

Copyright © by Holt, Rinehart and Winston. All rights reserved.

LESSON 8-1

Reteach

Building Blocks of Geometry

You can think of real-life objects to represent geometric terms.

Point: a polka dot



Point A

Line: a straight road in both directions



Line BC, or $\overleftrightarrow{BC}$

Ray: flashlight beam



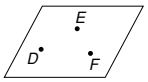
Ray PQ, or $\overrightarrow{PQ}$

Line segment: a ruler



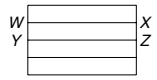
Line segment GH, or $\overline{GH}$

Part of a plane: table top



Plane DEF

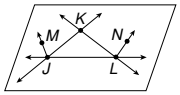
Congruent line segments: lines on an index card



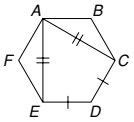
$\overline{WX} \cong \overline{YZ}$

For 1–5, use geometry notation to identify the figures.

1. three points
   J, K, L, M, N



2. three lines
   $\overleftrightarrow{JK}$, $\overleftrightarrow{KL}$, $\overleftrightarrow{JL}$
3. a plane
   Possible answer: plane JMK
4. three rays
   $\overrightarrow{LN}$, $\overrightarrow{JM}$, $\overrightarrow{JK}$, $\overrightarrow{KJ}$, $\overrightarrow{KL}$, $\overrightarrow{LK}$, $\overrightarrow{JL}$, $\overrightarrow{LJ}$
5. three line segments
   $\overline{JK}$, $\overline{KL}$, $\overline{JL}$, $\overline{JM}$, $\overline{LN}$
6. Identify the congruent line segments in the figure at the right.
   $\overline{AE} \cong \overline{AC}$; $\overline{CD} \cong \overline{DE}$



Copyright © by Holt, Rinehart and Winston. All rights reserved.

Copyright © by Holt, Rinehart and Winston. All rights reserved.