**10.** Lynn named this ray  $\overrightarrow{PQ}$ . Explain her error and give the correct name for the ray.



| Plane Geometry   | Exploration Recording Sheet           Points Lines and Planes   |
|--|---|
| Choose the best term from the list to complete each sentence.  | Geometry can be used to describe the physical world around us.  |
| protractor ruler triangle rectangle horizontal   | Check the box of the geometry term that each real-world item<br>represents.   |
| vertical clockwise counterclockwise  |   |
| <ol> <li>A closed figure with three sides is a <u>triangle</u> and a closed figure<br/>with four sides is a <u>rectangle</u>.</li> </ol>   | Point         Line Segment         Plane           1.         A freckle   |
| 2. A <u>protractor</u> is used to measure and draw angles.   | 2. A strand of hair   |
| 3.   | 3. A poster   |
|  | 4. A pixel on your calculator screen  |
| is moving <u>clockwise</u> . A line that extends left to right is <u>horizontal</u> .  | 5. A period at the<br>end of a sentence   |
| Use an inch ruler to measure each line to the nearest $\frac{1}{2}$ in. $1\frac{1}{2}$ in. $1\frac{1}{2}$ in.  | 6. A guitar string  |
| Use a centimeter ruler to measure each line to the nearest tenth of a centimeter   | 7. The minute hand of a clock   |
| 7 3 cm 8 1.5 cm  | 8. A computer screen  |
| Tell how many sides and angles each figure has.  |   |
| 9. 10. 11.   | Think and Discuss     Score and Discuss     Describe the characteristics of the items that you classified as  |
|  | <i>points</i> in the table above.   |
| <u>4 sides, 4 angles</u> <u>8 sides, 8 angles</u> <u>5 sides, 5 angles</u>   | Possible answer: Ine ligures are very small and without length.     Describe the characteristics of the items that you classified as     line segments in the table above.  |
| Which two figures are exactly the same size and shape but are  | Possible answer: The figures are long and thin and end and start  |
| In different positions?  | at a specific place.  |
|  |   |
| Copyright 0 by Holt, Risehart and Wiredon. 3 Holt Middle School Math Course 1<br>Al rights reserved.   | Copyright © by Holt, Rinehart and Winston. 7 Holt Middle School Math Course 1   |
|  |   |
|  |   |
| Visition         Practice A           Value         Points, Lines, and Planes           Name each geometric figure   | Practice B           Paints, Lines, and Planes  |
| Itesson       Practice A         Itesson       Practice A         Itesson       Points, Lines, and Planes         Name each geometric figure.       3.         1.       ·P       2.         3.       ····································  | Use the diagram to name each geometric figure. Possible answers are given.  |
| Itesson       Practice A         Image: Product of the second  | LESSON Practice B<br>LESSON Practice B<br>LESSON Prints, Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points <u>A and B</u><br>2. a plane plane ABD <u>A A B</u>   |
| Image: Practice A         Image: Points, Lines, and Planes         Name each geometric figure.         1. $\cdot P$ 2. $\overbrace{A \ B}$ 3. $\overbrace{F}$  | <b>ESSON</b> Practice B<br><b>Points</b> , Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points <u>A and B</u><br>2. a plane <u>plane ABD</u><br>3. a line segment <u>BD</u><br>C   |
| Image: Product of the second system       Product of the second system         Image: Product of the second system       P   | <b>ESSON</b> Practice B<br><b>FAI</b> Points, Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points <u>A and B</u><br>2. a plane <u>plane ABD</u><br>3. a line segment <u>BD</u><br>4. a point shared by two lines <u>A</u>  |
| Practice A         Fill       Points, Lines, and Planes         Name each geometric figure.       3.         1. $\cdot P$ 2. $\overrightarrow{AB}$ 3. $\overrightarrow{FG}$ $\overrightarrow{AB}$ or $\overrightarrow{BA}$ $\overrightarrow{FG}$ 4. $\overrightarrow{L}$ $\overrightarrow{M}$ $\overrightarrow{5.}$ $\overbrace{\sqrt{Y}$ $\overbrace{X}$ $\overbrace{AB}$ $\overbrace{G}$   | <b>ESSON</b> Practice B<br><b>FAI</b> Points, Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points $\underline{A}$ and $\underline{B}$<br>2. a plane <u>plane ABD</u><br>3. a line segment $\underline{BD}$<br>4. a point shared by two lines $\underline{A}$<br>5. a line $\underline{CD}$   |
| Practice A         Figure 1       Points, Lines, and Planes         Name each geometric figure.       3.         1. $\cdot P$ 2. $\overrightarrow{AB}$ 3. $\overrightarrow{G}$ Point P, or P $\overrightarrow{AB}$ or $\overrightarrow{BA}$ $\overrightarrow{FG}$ $\overrightarrow{FG}$ 4. $\overrightarrow{L}$ $\overrightarrow{M}$ $\overrightarrow{S}$ . $\overrightarrow{Y}$ $\overrightarrow{K}$ $\overrightarrow{K}$   | <b>ESSON</b> Practice B<br><b>FAI</b> Points, Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points <u>A and B</u><br>2. a plane <u>plane ABD</u><br>3. a line segment <u>BD</u><br>4. a point shared by two lines <u>A</u><br>5. a line <u>CD</u><br>Use the diagram to give a possible name for each figure. Possible answers are given.   |
| Practice A         Points, Lines, and Planes         Name each geometric figure.         1. $\cdot P$ 2. $\overrightarrow{A \ B}$ 3. $\overrightarrow{F}$ Point P, or P $\overrightarrow{AB}$ or $\overrightarrow{BA}$ $\overrightarrow{FG}$ 4. $\overrightarrow{L}$ $\overrightarrow{M}$ 5. $\overbrace{\sqrt{Y}}$ $\overrightarrow{X}$ $\overrightarrow{LM}$ or $\overrightarrow{ML}$ plane XYZ $\overrightarrow{JK}$ or $\overrightarrow{KJ}$   | <b>ESSON</b> Practice B<br><b>FAI</b> Points, Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points <u>A and B</u><br>2. a plane <u>plane ABD</u><br>3. a line segment <u>BD</u><br>4. a point shared by two lines <u>A</u><br>5. a line <u>CD</u><br>Use the diagram to give a possible name for each figure. Possible answers are given.<br>[Ine XY and $\overline{XY}$ ]  |
| Practice A         Figure 1       Points, Lines, and Planes         Name each geometric figure.       3.         1. $\cdot P$ 2. $\overrightarrow{AB}$ or $\overrightarrow{BA}$ $\overrightarrow{FG}$ 4. $\overrightarrow{L}$ $\overrightarrow{M}$ $\overrightarrow{S}$ . $\overrightarrow{FG}$ 4. $\overrightarrow{L}$ $\overrightarrow{M}$ $\overrightarrow{S}$ . $\overrightarrow{FG}$ $\overrightarrow{L}$ $\overrightarrow{M}$ $\overrightarrow{S}$ . $\overrightarrow{FG}$ $\overrightarrow{FG}$ $\overrightarrow{L}$ $\overrightarrow{M}$ $\overrightarrow{S}$ . $\overrightarrow{Y}$ $\overrightarrow{K}$ $\overrightarrow{FG}$ $\overrightarrow{L}$ $\overrightarrow{M}$ $\overrightarrow{S}$ . $\overrightarrow{Y}$ $\overrightarrow{K}$ $\overrightarrow{K}$ $\overrightarrow{K}$ $\overrightarrow{LM}$ or $\overrightarrow{ML}$ plane XYZ $\overrightarrow{JK}$ or $\overrightarrow{KJ}$ Use the diagram to choose the correct answer.   | <b>Practice B</b><br><b>FAI</b> Points, Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points <u>A and B</u><br>2. a plane <u>plane ABD</u><br>3. a line segment <u>BD</u><br>4. a point shared by two lines <u>A</u><br>5. a line <u>CD</u><br>Use the diagram to give a possible name for each figure. Possible answers are given.<br>6. two different ways to name the line <u>Q</u><br>7. four different names for rays  |
| <b>Practice A</b><br><b>Points, Lines, and Planes</b><br>Name each geometric figure.<br>1. $\circ P$<br>2. $\overrightarrow{A B}$<br>3. $\overrightarrow{FG}$<br>4. $\overrightarrow{L M}$<br>5. $\overrightarrow{Y}$<br>$\overrightarrow{L}$<br>$\overrightarrow{L}$<br>$\overrightarrow{K}$<br>$\overrightarrow{L}$<br>$\overrightarrow{M}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow{K}$<br>$\overrightarrow$ | <b>ESSON</b> Practice B<br><b>FAI</b> Points, Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points <u>A and B</u><br>2. a plane <u>plane ABD</u><br>3. a line segment <u>BD</u><br>4. a point shared by two lines <u>A</u><br>5. a line <u>CD</u><br>Use the diagram to give a possible name for each figure. Possible answers are given.<br>6. two different ways to name the line<br><u>line XY and XY</u><br>7. four different names for rays<br><u>ray PY, ray PX, PY, and PX</u><br>X = P Y  |
| Practice A         Figure 1       Points, Lines, and Planes         Name each geometric figure.       3.         1. $\cdot P$ 2. $\overrightarrow{AB}$ or $\overrightarrow{BA}$ $\overrightarrow{FG}$ 4. $\overrightarrow{L}$ $\overrightarrow{M}$ $\overrightarrow{S}$ . $\overrightarrow{FG}$ $\overrightarrow{FG}$ 4. $\overrightarrow{L}$ $\overrightarrow{M}$ $\overrightarrow{S}$ . $\overrightarrow{Y}$ $\overrightarrow{AB}$ or $\overrightarrow{BA}$ $\overrightarrow{FG}$ 4. $\overrightarrow{L}$ $\overrightarrow{M}$ $\overrightarrow{S}$ . $\overrightarrow{Y}$ $\overrightarrow{X}$ $\overrightarrow{K}$ $\overrightarrow{LM}$ or $\overrightarrow{ML}$ plane XYZ $\overrightarrow{JK}$ or $\overrightarrow{KJ}$ Use the diagram to choose the correct answer. $\overrightarrow{Y}$ $\overrightarrow{A}$ line YQ $\overrightarrow{Y}$  | <b>ESSON</b> Practice B<br><b>FAI</b> Points, Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points <u>A and B</u><br>2. a plane <u>plane ABD</u><br>3. a line segment <u>BD</u><br>4. a point shared by two lines <u>A</u><br>5. a line <u>CD</u><br>Use the diagram to give a possible name for each figure. Possible answers are given.<br>6. two different ways to name the line<br><u>line XY and XY</u><br>7. four different names for rays<br><u>ray PY, ray PX, PY, and PX</u><br>8. another name for $\overline{QP}$  |
| Practice A         Points, Lines, and Planes         Name each geometric figure.         1. $\cdot P$ 2. $\overrightarrow{A} = B$ 3. $\overrightarrow{F} = G$ point P, or P $\overrightarrow{AB}$ or $\overrightarrow{BA}$ $\overrightarrow{FG}$ 4. $\overrightarrow{L} = M$ 5. $\overbrace{Y = Z}$ 6. $\overbrace{F}$ $\overrightarrow{LM}$ or $\overrightarrow{ML}$ plane XYZ $\overrightarrow{JK}$ or $\overrightarrow{KJ}$ Use the diagram to choose the correct answer.         7. Which of the following does not name a line on the diagram? $\overrightarrow{X}$ A Line YQ $\overbrace{Z}$ $\overbrace{X}$   | <b>Practice B</b><br><b>FAI</b> Points, Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points $\underline{A}$ and $\underline{B}$<br>2. a plane <u>plane ABD</u><br>3. a line segment $\underline{BD}$<br>4. a point shared by two lines $\underline{A}$<br>5. a line $\underline{CD}$<br>Use the diagram to give a possible name for each figure. Possible answers are given.<br>6. two different ways to name the line<br>$\underline{line XY \text{ and } \overline{XY}}$<br>7. four different names for rays<br>$\underline{ray PY, ray PX, PY, and PX}$<br>8. another name for $\overline{QP}$<br>$\underline{PO}$<br>9. Is the following statement always true, sometimes true, or   |
| <b>Practice A</b><br><b>Points, Lines, and Planes</b><br>Name each geometric figure.<br>1. $\cdot P$<br>2. $\overrightarrow{A \ B}$<br>3. $\overrightarrow{F}$<br>4. $\overrightarrow{L}$<br>M<br>4. $\overrightarrow{L}$<br>M<br>5. $\overrightarrow{Y}$<br>$\overrightarrow{X}$<br>$\overrightarrow{Z}$<br><b>Dimer Prediction</b><br><b>AB or BA</b><br><b>FG</b><br><b>6.</b> $\overrightarrow{FG}$<br><b>6.</b> $\overrightarrow{K}$<br><b>JK or KJ</b><br><b>Use the diagram to choose the correct answer.</b><br>7. Which of the following does not name<br>a line on the diagram?<br>A Line YQ<br><b>B</b> Line WZ<br><b>C</b> $\overrightarrow{ZX}$<br><b>D</b> $\overrightarrow{QW}$<br><b>C</b> $\overrightarrow{ZX}$<br><b>D</b> $\overrightarrow{QW}$   | <b>Practice B</b><br><b>Val</b> Points, Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points <u>A and B</u><br>2. a plane <u>plane ABD</u><br>3. a line segment <u>BD</u><br>4. a point shared by two lines <u>A</u><br>5. a line <u>CD</u><br>Use the diagram to give a possible name for each figure. Possible answers are given.<br>6. two different ways to name the line<br><u>line XY and XY</u><br>7. four different names for rays<br><u>ray PY, ray PX, PY, and PX</u><br>8. another name tor $\overline{QP}$<br><u>PO</u><br>9. Is the following statement always true, sometimes true, or never true? Explain your reasoning. A line is longer than a line segment.  |
| <b>Practice A</b><br><b>Points, Lines, and Planes</b><br>Name each geometric figure.<br>1. $\cdot P$<br>2. $\overrightarrow{A \ B}$<br>3. $\overrightarrow{F}$<br>4. $\overrightarrow{L \ M}$<br>5. $\overrightarrow{Y}$<br>$\overrightarrow{Z}$<br><b>B</b> or <b>BA</b><br>6. $\overrightarrow{K}$<br>$\overrightarrow{K}$<br><b>IM</b> or <b>ML</b><br><b>plane XYZ</b><br><b>JK</b> or <b>KJ</b><br>Use the diagram to choose the correct answer.<br>7. Which of the following does not name<br>a line on the diagram?<br>A Line YQ<br>(B) Line WZ<br>C $\overrightarrow{ZX}$<br>D $\overrightarrow{QW}$<br>8. Which two points cannot be used to<br>name a ray on the diagram?  | <b>ESSON</b> Practice B<br><b>FAI</b> Points, Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points <u>A and B</u><br>2. a plane <u>plane ABD</u><br>3. a line segment <u>BD</u><br>4. a point shared by two lines <u>A</u><br>5. a line <u>CD</u><br>Use the diagram to give a possible name for each figure. Possible answers are given.<br>6. two different ways to name the line<br><u>line XY and XY</u><br>7. four different names for rays<br><u>ray PY, ray PX, PY, and PX</u><br>8. another name for $\overline{OP}$<br><u>PQ</u><br>9. Is the following statement always true, sometimes true, or never true? Explain your reasoning. A line is longer than a line segment.<br>It is always true, because a line segment only extends between two  |
| <b>Practice A</b><br><b>Points, Lines, and Planes</b><br>Name each geometric figure.<br>1. $\cdot P$<br>2. $\overrightarrow{A \ B}$<br>3. $\overrightarrow{F}$<br>4. $\overrightarrow{L}$<br>M<br>4. $\overrightarrow{L}$<br>M<br>5. $\overrightarrow{Y}$<br>$\overrightarrow{Z}$<br>$\overrightarrow{LM}$ or $\overrightarrow{ML}$<br><b>Plane XYZ</b><br><b>JK or <math>\overrightarrow{KJ}</math></b><br>Use the diagram to choose the correct answer.<br>7. Which of the following does not name<br>a line on the diagram?<br>A Line YQ<br>(B) Line WZ<br>C $\overrightarrow{ZX}$<br>D $\overrightarrow{QW}$<br>8. Which two points cannot be used to<br>name a ray on the diagram?<br>F Q and Y   | <b>Practice B</b><br><b>Val</b> Points, Lines, and Planes<br>Use the diagram to name each geometric figure. Possible answers are given.<br>1. two points <u>A and B</u><br>2. a plane <u>plane ABD</u><br>3. a line segment <u>BD</u><br>4. a point shared by two lines <u>A</u><br>5. a line <u>CD</u><br>Use the diagram to give a possible name for each figure. Possible answers are given.<br>6. two different ways to name the line<br><u>line XY and XY</u><br>7. four different names for rays<br><u>ray PY, ray PX, PY, and PX</u><br>8. another name for $\overline{QP}$<br><u>PQ</u><br>9. Is the following statement always true, sometimes true, or never true? Explain your reasoning. A line is longer than a line segment.<br>It is always true, because a line segment only extends between two endpoints, but a line extends without end in opposite directions.  |
| <b>Practice A</b><br><b>Points, Lines, and Planes</b><br>Name each geometric figure.<br>1. $\cdot P$<br>2. $\overrightarrow{A \ B}$<br>3. $\overrightarrow{F}$<br>4. $\overrightarrow{L}$<br>M<br>4. $\overrightarrow{L}$<br>M<br>5. $\overrightarrow{Y}$<br>$\overrightarrow{Z}$<br>Diane XYZ<br>JK or KJ<br>Use the diagram to choose the correct answer.<br>7. Which of the following does not name<br>a line on the diagram?<br>A Line YQ<br>B Line WZ<br>C $\overrightarrow{ZX}$<br>D $\overrightarrow{QW}$<br>8. Which two points cannot be used to<br>name a ray on the diagram?<br>F Q and Y<br>G Z and X<br>( $\Re$ X and Y   | Practice B         Val Points, Lines, and Planes         Use the diagram to name each geometric figure. Possible answers are given.         1. two points       A and B         2. a plane       plane ABD         3. a line segment       BD         4. a point shared by two lines       A         5. a line       CD         Use the diagram to give a possible name for each figure. Possible answers are given.         5. a line       CD         Use the diagram to give a possible name for each figure. Possible answers are given.         Inter XY and XY         7. four different ways to name the line       Q         Image: ray PY, ray PX, PY, and PX         8. another name for $\overline{OP}$ Q         PO       PO         9. Is the following statement always true, sometimes true, or never true? Explain your reasoning. A line is longer than a line segment.         It is always true, because a line segment only extends between two endpoints, but a line extends without end in opposite directions.   |
| <b>Practice A</b><br><b>Points, Lines, and Planes</b><br>Name each geometric figure.<br>1. $\cdot p$<br>2. $\overrightarrow{A \ B}$<br>3. $\overrightarrow{F}$<br>4. $\overrightarrow{L \ M}$<br>5. $\overrightarrow{Y}$<br>$\overrightarrow{Z}$<br><b>B</b> or <b>BA</b><br>6. $\overrightarrow{K}$<br>$\overrightarrow{IM}$ or $\overrightarrow{ML}$<br><b>plane XYZ</b><br><b>JK</b> or $\overrightarrow{KJ}$<br>Use the diagram to choose the correct answer.<br>7. Which of the following does not name<br>a line on the diagram?<br>A Line YQ<br>(B) Line WZ<br>C $\overrightarrow{ZX}$<br>D $\overrightarrow{QW}$<br>8. Which two points cannot be used to<br>name a ray on the diagram?<br>F Q and Y<br>G Z and X<br>(F) X and Y<br>J Wand Q   | Practice BLissen Practice BValue Points, Lines, and PlanesUse the diagram to name each geometric figure. Possible answers are given.1. two points $A$ and $B$ 2. a plane $plane ABD$ 3. a line segment $BD$ 4. a point shared by two lines $A$ 5. a line $CD$ Use the diagram to give a possible name for each figure.Possible answers are given.Inter XY and $\overline{XY}$ 7. four different names for raysInte XY and $\overline{XY}$ 8. another name for $\overline{QP}$ $PQ$ 9. Is the following statement always true, sometimes true, or never true? Explain your reasoning. A line is longer than a line segment.It is always true, because a line segment only extends between two endpoints, but a line extends without end in opposite directions.10. Using endpoints as your basis, explain how a line, a line segment, and a ray are different.   |
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