

3-1: Parallel Line Proofs

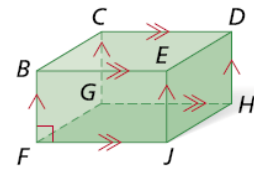
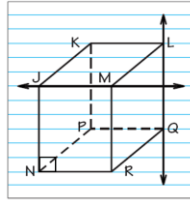
“I WILL ...

...identify the angles formed by two lines and a transversal.”

I. Definitions

- A. \_\_\_\_\_ are coplanar and do not intersect
- B. \_\_\_\_\_ intersect at  $90^\circ$  angles
- C. \_\_\_\_\_ are not coplanar. They are not parallel and do not intersect

<p>Ex 1: Identify the following:</p> <p>Pair of parallel segments</p> <p>a pair of skew segments</p> <p>a pair of perpendicular segments</p>	<p>Your Turn: Identify the following:</p> <p>Pair of parallel segments</p> <p>a pair of skew segments</p> <p>a pair of perpendicular segments</p>
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II. Definitions

- A. \_\_\_\_\_ are a pair of angles that lie on the same side of the transversal and on the same sides of the two other lines.
- B. \_\_\_\_\_ are two parallel lines are cut by a transversal, then the pairs of corresponding angles are congruent.
- C. \_\_\_\_\_ is a line that intersects two coplanar lines at two different points.
- D. \_\_\_\_\_ are nonadjacent angles that lie on opposite sides of the transversal
- E. \_\_\_\_\_ lie on opposite sides of the transversal
- F. \_\_\_\_\_ lies on the same side of the transversal (also known as consecutive interior angles)

<p>Ex 2: Give an example of a corresponding angle, alternate interior angle, alternate exterior angle, and same-side interior angle.</p>	<p>Your Turn: Identify the transversal and classify each angle pair.</p> <ul style="list-style-type: none"> <li>A. <math>\angle 1</math> and <math>\angle 3</math></li> <li>B. <math>\angle 2</math> and <math>\angle 6</math></li> <li>C. <math>\angle 4</math> and <math>\angle 3</math></li> </ul>
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