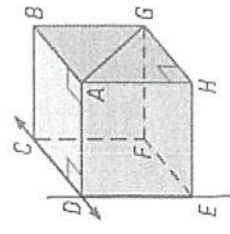


Name, Date, Hour:	Learning Target:	Homework:
key	3.1: Identify Pairs of Lines & Angles	Day 1

BOX 1 - Vocabulary	<p>Parallel Lines: coplanar, non-intersecting lines $m // n$</p> <p>Skew Lines: noncoplanar, non-intersecting lines $k \not\parallel m$</p> <p>Parallel Planes: planes that do not intersect $T // U$</p>
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BOX 2 - Example 1	<p>Think of each segment in the figure as part of a line. Which line(s) or plane(s) appear to fit the description?</p> <p>a. Line(s) parallel to and containing point C. \overleftrightarrow{CD}</p> <p>b. Lines(s) skew to \overleftrightarrow{ED}. $\overleftrightarrow{AB}, \overleftrightarrow{GH}, \overleftrightarrow{AG}, \overleftrightarrow{FG}, \overleftrightarrow{CB}, \text{etc.}$</p> <p>c. Lines(s) perpendicular to \overleftrightarrow{ED}. $\overleftrightarrow{DC}, \overleftrightarrow{EH}, \overleftrightarrow{DA}, \overleftrightarrow{EF}$</p> <p>d. Plane(s) parallel to plane ABH. plane DCE</p>
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BOX 3 - Postulates 13 & 14	<p>Parallel Postulate: if there is a line and a point <u>not</u> on the line, then there is exactly one line through the point parallel to the given line.</p> <p>Perpendicular Postulate: if there is a line and a point <u>not</u> on the line, then there is exactly one line through the point perpendicular to the given line.</p>						
BOX 4 - More vocab!	<table border="1"> <tr> <td>Interior Angles</td> <td>angles between 2 lines (2,4,5,7)</td> </tr> <tr> <td>Exterior Angles</td> <td>angles outside of 2 lines (1,3,6,8)</td> </tr> <tr> <td>Transversal</td> <td>a line that intersects two or more coplanar lines at diff points</td> </tr> </table>	Interior Angles	angles between 2 lines (2,4,5,7)	Exterior Angles	angles outside of 2 lines (1,3,6,8)	Transversal	a line that intersects two or more coplanar lines at diff points
Interior Angles	angles between 2 lines (2,4,5,7)						
Exterior Angles	angles outside of 2 lines (1,3,6,8)						
Transversal	a line that intersects two or more coplanar lines at diff points						

BOX 5 - More Angle Relationships

Corresponding Angles

- same spot $\angle 1 + \angle 5$, $\angle 3 + \angle 7$

Consecutive Interior Angles

- same side of transversal
- inside 2 lines

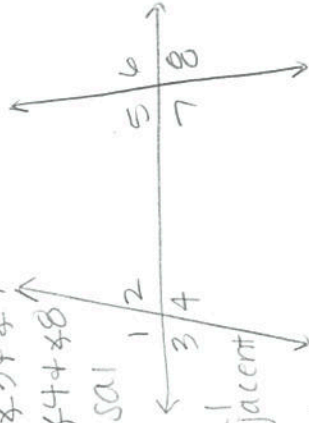
Alternate Interior Angles

- diff sides of transversal
- inside 2 lines • non-adjacent

Alternate Exterior Angles

- diff sides of transversal
- outside 2 lines • non-adjacent

$\angle 1 + \angle 8$, $\angle 3 + \angle 6$



BOX 6 - Example 2

Identify all pairs of angles of the given type.

a. Corresponding Angles

$\angle 2 + \angle 6$, $\angle 3 + \angle 7$,
 $\angle 1 + \angle 5$, $\angle 4 + \angle 8$

b. Alternate Interior

$\angle 3 + \angle 5$
 $\angle 4 + \angle 6$

c. Alternate Exterior

$\angle 1 + \angle 7$
 $\angle 2 + \angle 8$

d. Consecutive Interior

$\angle 3 + \angle 6$, $\angle 4 + \angle 5$

