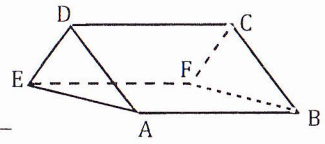
NOTES 3.1 & 3.2 – PARALLEL LINES & TRANSVERSALS

Objective: _____

_____

CONCEPT	DESCRIPTION	DIAGRAM
Parallel Lines //	Coplanar lines that do not intersect	
Parallel Planes	Planes that do not intersect	

Use the figure below to answer the questions that follow.



(a) What lines are parallel to $\overleftrightarrow{AB}$? _____

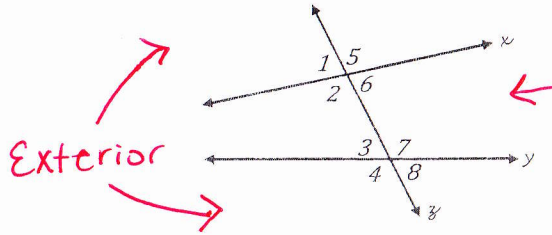
(b) What are the other sets of parallel lines? _____

_____

(c) Name a pair of parallel planes: _____

CONCEPT	DESCRIPTION	DIAGRAM
Transversal	A line that intersects 2 coplanar lines at 2 different points	

When two lines are cut by a transversal, several types of angle pairs are formed.



Exterior

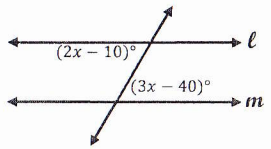
Interior

* z is the transversal

CONCEPT	DESCRIPTION	EXAMPLES
Alternate Interior Angles	Non-adjacent, interior ∠s on opposite sides of the transversal	
Alternate Exterior Angles	Non-adjacent, exterior ∠s on opposite sides of the transversal	
Same-Side Interior Angles	Interior ∠s on the same side of the transversal	
Same-Side Exterior Angles	Exterior ∠s on the same side of the transversal	
Corresponding Angles	∠s that are in the same position relative to the lines and the transversal	

For each of the examples below, identify the type of angle pair, and given that lines ℓ and m are parallel, find the value of 'x'.

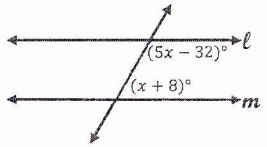
EXAMPLE 1:



Type of angle pair: _____

$x =$ _____

EXAMPLE 2:



Type of angle pair: _____

$x =$ _____