### Wednesday, September 5, 2012

#### TISK Problems

- 1) Simplify:  $(3mr^3)^2$
- 2) Factor completely:  $8x^2 + 8x 16$
- 3) Write the segment addition postulate for the segment shown:



We will not have Mental Math questions today.

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Homework: p. 128
#16-33 mentally;
34-43 writing
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# §3.1 Parallel Lines & Transversals

### Parallel lines

 Two lines are parallel if and only if they are coplanar and never intersect.

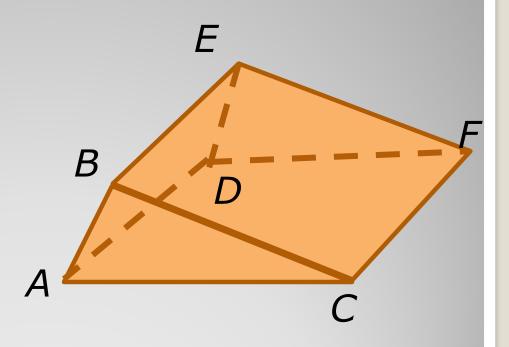


 Two lines are skew if and only if they are NOT coplanar and never intersect

Parallel planes

 Two planes are parallel if and only if they never intersect  All pairs of parallel planes.

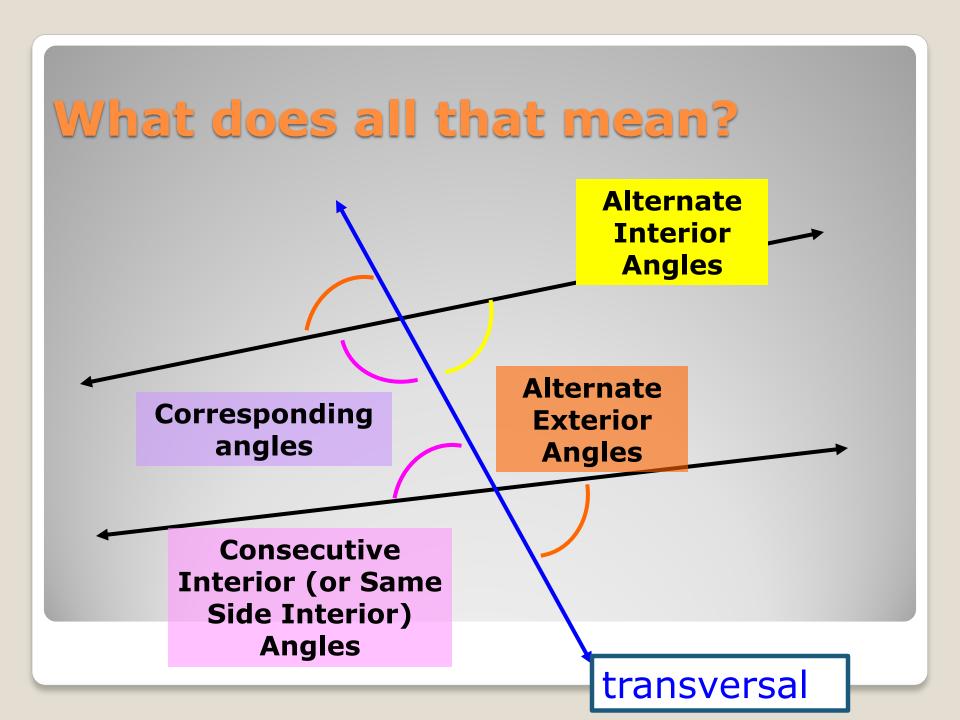
 All pairs of skew lines.



Name...

# **More Definitions**

- Transversals
  - A line that intersects two or more coplanar lines
- Corresponding Angles
  - Two angles that occupy corresponding positions
- Alternate Exterior Angles
  - Two angles that lie outside the two lines on opposite sides of a transversal
- Alternate Interior Angles
  - Two angles that lie between the two lines on opposite sides of a transversal
- Consecutive Interior Angles
  - Two angles that lie between the two lines on the same side of a transversal (Also called: Same Side Interior Angles)



### **Check Points**

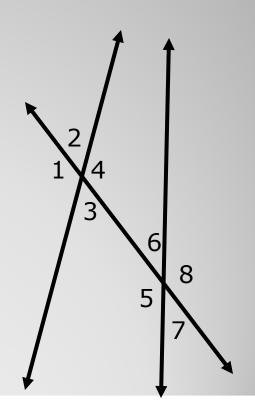
List all pairs of angles that fit the description.

a. Corresponding

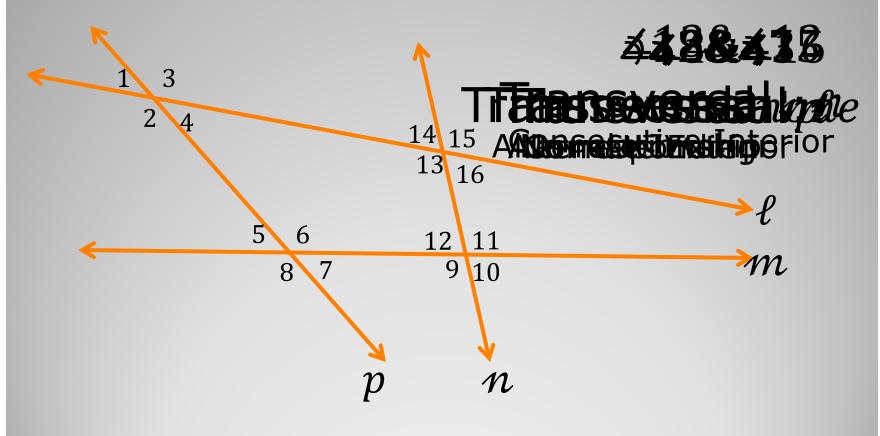
Alternate exterior

Alternate interior

Consecutive interior



State the transversal that forms each pair of angles.
 Then identify the special name for the angle pair.



**Practice** 

Homework: p. 128 #16-33 mentally; 34-43 writing

Homework