

4.5 notes

Thursday, November 14, 2013
6:47 AM

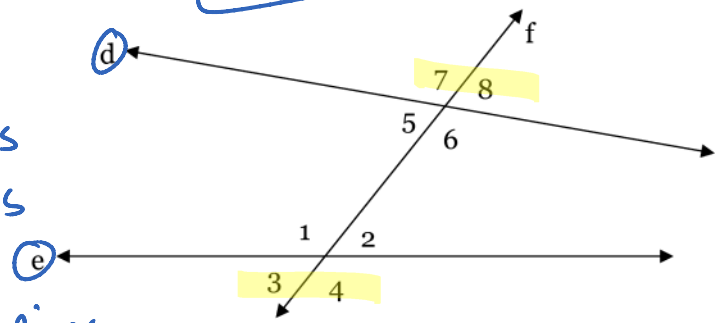
4.5 Introduction to Parallel Lines

Relationships

Transversal - line f.

Label the interior region: \angle
↳ space between 2 lines

Label the exterior region
↳ space outside 2 lines



Types of Angles formed by a Transversal:

1) Consecutive (same side) Interior Angles:

$\angle 1$ and $\angle 5$ $\angle 2$ and $\angle 6$

2) Consecutive (same side) Exterior Angles:

$\angle 3$ and $\angle 7$ $\angle 4$ and $\angle 8$

3) Alternate Interior Angles:

$\angle 5$ and $\angle 2$ $\angle 6$ and $\angle 1$

4) Alternate Exterior Angles:

$\angle 7$ and $\angle 4$ $\angle 3$ and $\angle 8$

5) Corresponding Angles:

$\angle 7$ and $\angle 1$ $\angle 8$ and $\angle 2$ $\angle 6$ and $\angle 4$ $\angle 5$ and $\angle 3$

Parallel Lines

Symbol: || Example:

$\angle 1$ and $\angle 5$ are same side int. angles

$\angle 14$ and $\angle 2$ are Alt. ext. \angle 's angles

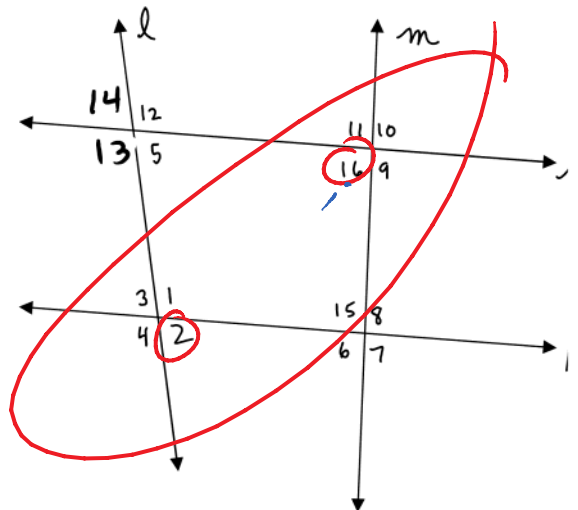
$\angle 12$ and $\angle 1$ are corresponding angles

$\angle 13$ and $\angle 16$ are corresponding angles

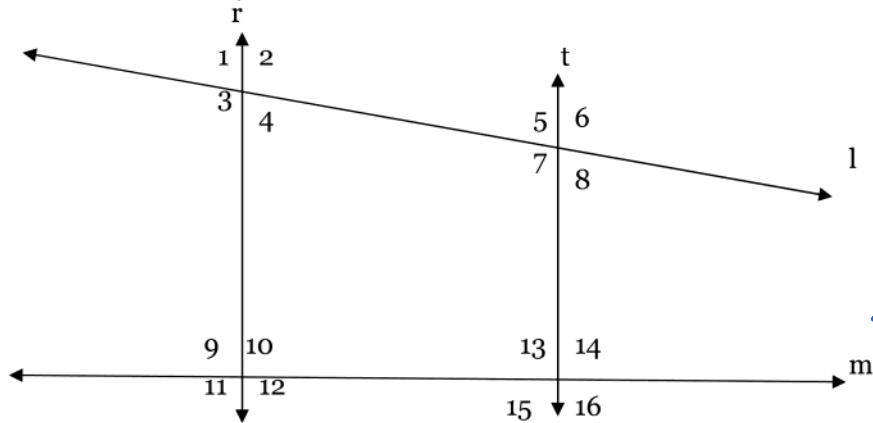
$\angle 15$ and $\angle 16$ are same side int angles

$\angle 3$ and $\angle 7$ are Alt. ext. \angle 's angles

$\angle 16$ and $\angle 2$ are None !! angles



Use the picture below to answer questions 1 – 9.



Corr.

Alt. ext. \angle 's

1) Are $\angle 1$ and $\angle 12$ alternate interior angles?

No

2) Are $\angle 1$ and $\angle 16$ alternate exterior angles?

No

3) What kind of angles are $\angle 7$ and $\angle 2$?

Alt. int. \angle 's

4) What kind of angles are $\angle 7$ and $\angle 8$?

Supp

5) Name two pairs of alternate interior angles along transversal t .

6) Name two pairs of alternate exterior angles along transversal m .

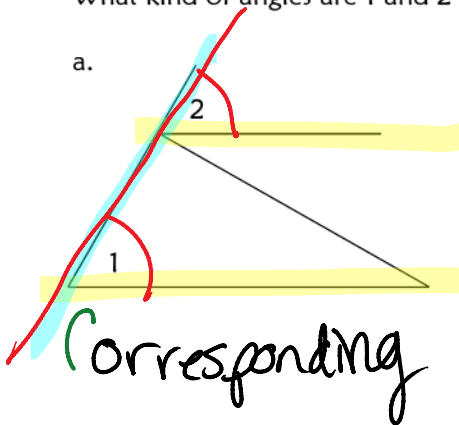
7) Name two pairs of corresponding angles along transversal l .

8) Name two same side exterior angles.

9) Name two same side interior angles.

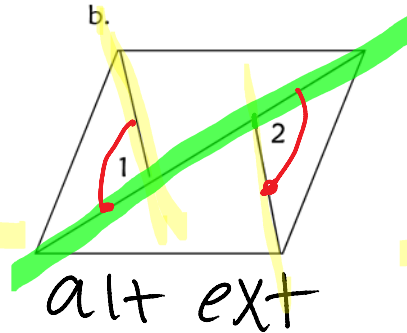
What kind of angles are 1 and 2 in each of the following?

a.



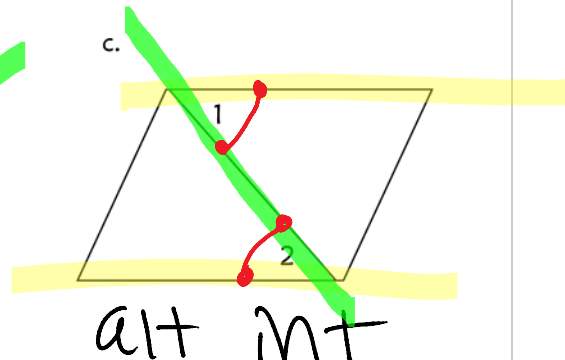
Corresponding

b.



alt ext

c.



alt int