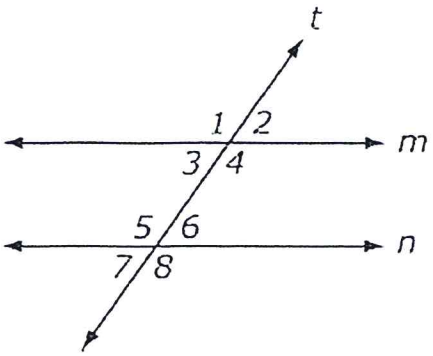
Use the figure below to answer numbers 4 – 6.

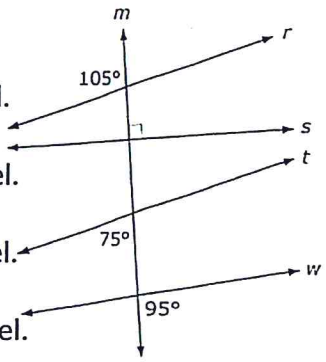


4. Transversal t cuts parallel lines m and n. Which angle is congruent to $\angle 1$?
   (a) $\angle 2$
   (b) $\angle 3$
   (c) $\angle 7$
   (d) $\angle 8$

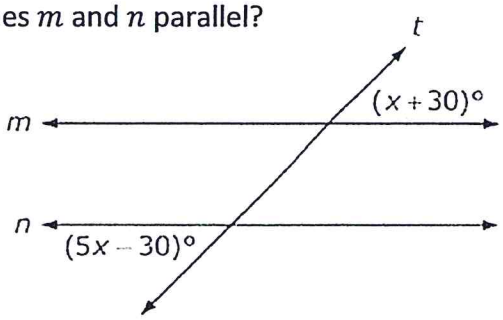
5. Transversal t cuts parallel lines m and n. If the $m\angle 4 = 110°$, what is the $m\angle 7$?
   (a) 20°
   (b) 55°
   (c) 70°
   (d) 110°

6. Which statement must be true about $\angle 3$ and $\angle 6$ in order for line m and n to be parallel?
   (a) Their measures must be equal.
   (b) Their measures must be supplementary.
   (c) Their measure must be complementary.
   (d) The measure of $\angle 3$ must be greater than the measure of $\angle 2$.

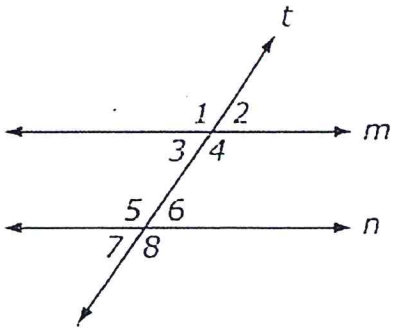
7. Line m intersects lines r, s, t, and w. Which statement must be true?
   (a) Lines r and s are parallel.
   (b) Lines r and t are parallel.
   (c) Lines r and w are parallel.
   (d) Lines s and w are parallel.



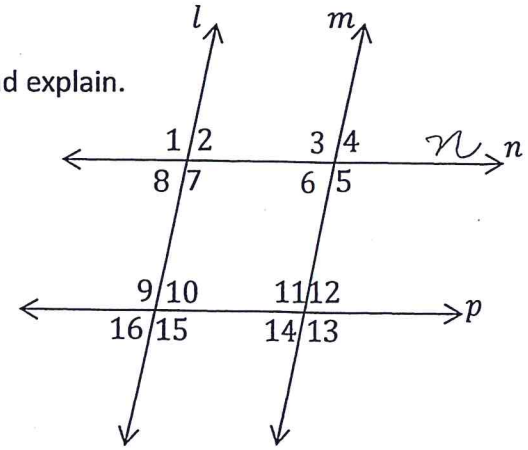
8. Line t intersects lines m and n. For what value of x are lines m and n parallel?
   (a) 12
   (b) 15
   (c) 30
   (d) 45

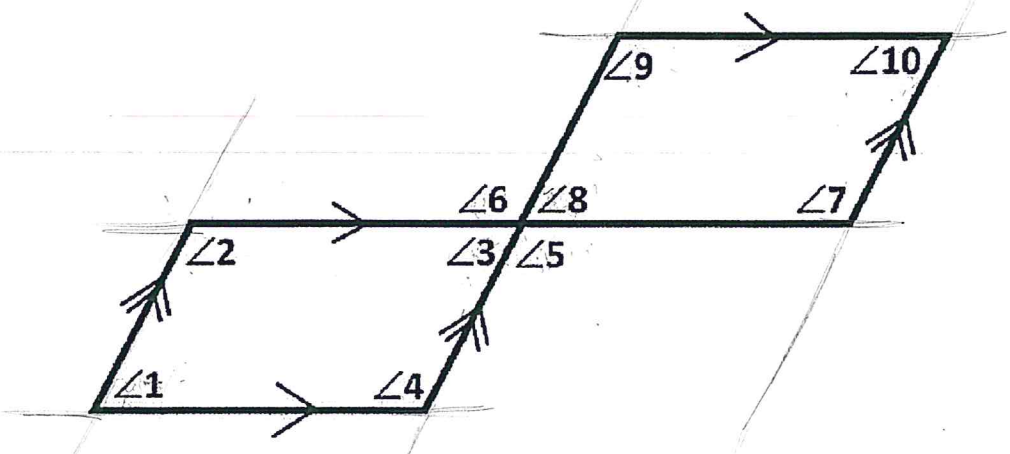


9. Line t intersects line m and n. Which angle has to be supplementary to $\angle 6$ for lines m and n to be parallel?
   (a) $\angle 2$
   (b) $\angle 4$
   (c) $\angle 7$
   (d) $\angle 8$



10. Given that $l \parallel m$ and $\angle 4 \cong \angle 10$, are lines n and p parallel? Justify and explain.





Please write in your "In Class" section of your notebook.

Using linear pair, vertical angles, corresponding angles, consecutive angles, alternate interior angles, and alternate exterior angles:

how to get from ∠1 to ∠3 in two "jumps."

1) Explain ~~why it is not possible to jump from ∠1 to ∠3~~

2) Find a path from ∠1 to ∠10 that uses at least 5 jumps
(ie: ∠1 to ∠4 by consecutive angles; ∠4 to ∠5 by alternate interior angles; ...)

3) Find a path from ∠1 to ∠10 that uses vertical angles twice

4) Find a path from ∠1 to ∠10 that uses every angle

5) Find the *shortest* path from ∠1 to ∠10