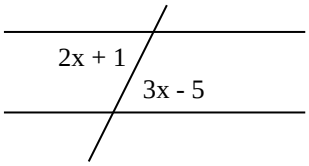
Geometry Honors Chapter 3 Review

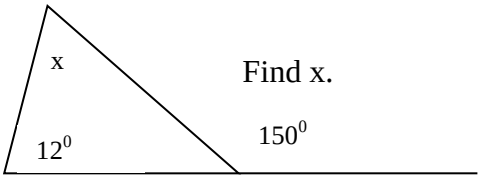
- When given a diagram be able to identify angles that are corresponding, vertical, alternate interior, etc.
- Study review that was given for homework!
- Know how to do Digits Place and Color Square Game

Practice Problems:

1) Write the equation of a line that passes through (3, 6) and (-1, 5).

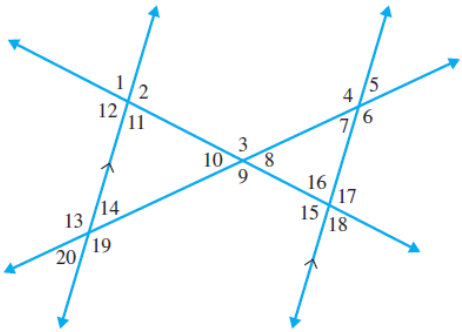
2) 

Find x and the angle if the lines are parallel.

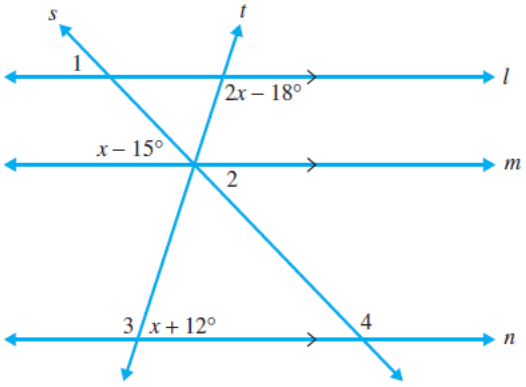
3) 

Find x.

4) Find the measures of all the angles if angle m∠10 = 58 and m∠18 = 75

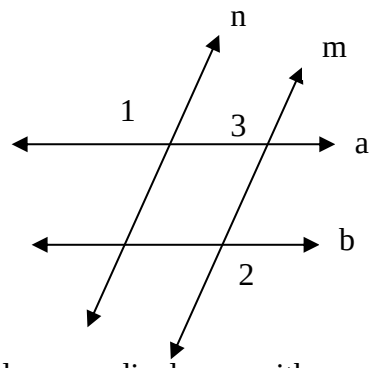


5) Find the measures of ∠1, ∠2, ∠3, and ∠4 if some angles formed are related as shown.



6) Line r passes thru (1, 3) and (6, 10) and is parallel to line s that passes thru (-3, 2) and (x, y). What are possible values for x and y?

7) Given: m || n, $\angle 1 \cong \angle 2$
Prove: a || b



8) Review proofs we did in class.

9) Determine whether 2x – y = 10 and x + 2y = 6 are parallel, perpendicular or neither.

10) What is the equation of a line that passes thru (3, 2) and is perpendicular to 4x + y = 10?

11) Suppose you have point A(1, 3) and B(4, 12) and wanted to place point P along segment AB so that it partitions the segment into a 3:2 ratio. What would be the coordinates of point P?

Answers:

1) y = ¼ x + 21/4
2) x = 6, 13^0
3) x = 138^0
4) 1 = 75, 2 = 105, 3 = 122, 4 = 133, 5 = 47, 6 = 133, 7 = 47, 8 = 58, 9 = 122, 10 = 58, 11 = 75, 12 = 105, 13 = 133, 14 = 47, 15 = 105, 16 = 75, 17 = 105, 18 = 75
5) (2x – 18) + (x + 12) = 180, x = 62 so $\angle 1 = \angle 2 = 47$, $\angle 3 = 106$, $\angle 4 = 133$
6) x = 2, y = 9
7)

1) -----	1) Given
2) $\angle 1 \cong \angle 3$	2) Corresponding angles
3) $\angle 2 \cong \angle 3$	3) substitution
4) a || b	4) Converse of alt exterior

8) ---
9) perpendicular
10) y – 2 = ¼ (x – 3)
11) (14/5, 36/5)