3.1-3.3 Study Guide Name: _____

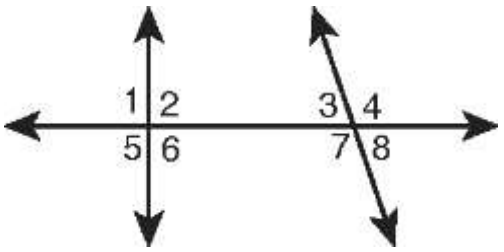
Directions: Please complete each section and then check your answers. Then, self-assess your understanding of each target using a 1 to 5 scale, where 1 is Not Good, 3 is Okay..., and 5 is I Got This!!! If you are not a 5, please retry other problems from that section and seek out help!

3.1 Lines and Angles

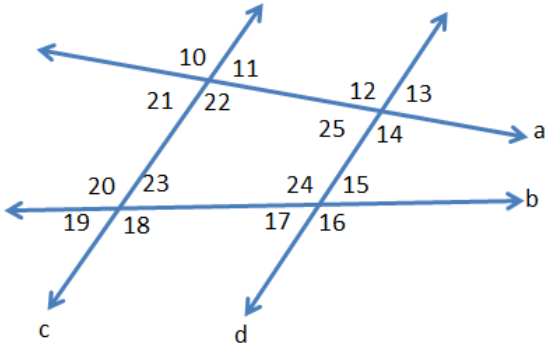
Learning Target 3.1: Name a transversal and classify each pair of angles. 1 2 3 4 5

For # 1– 6, give an example of each type of angle pair:

1) Corresponding Angles: _____
2) Alternate Interior Angles: _____
3) Same Side Interior Angles: _____
4) Alternate Exterior Angles: _____
5) Vertical Angles: _____
6) Linear Pair Angles: _____



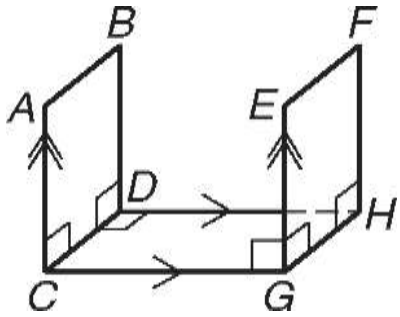
For #7-10, answer the following using the diagram on the right.



7) What type of angles are 21 and 23 _____
8) What type of angles are 11 and 18 _____
9) What type of angles are 25 and 21 _____
10) What type of angles are 19 and 16 _____

For #11-13 answer the following using the diagram on the right.

11) Identify a pair of parallel segments _____
12) Identify a pair of skew segments _____
13) Identify a pair of perpendicular segments _____

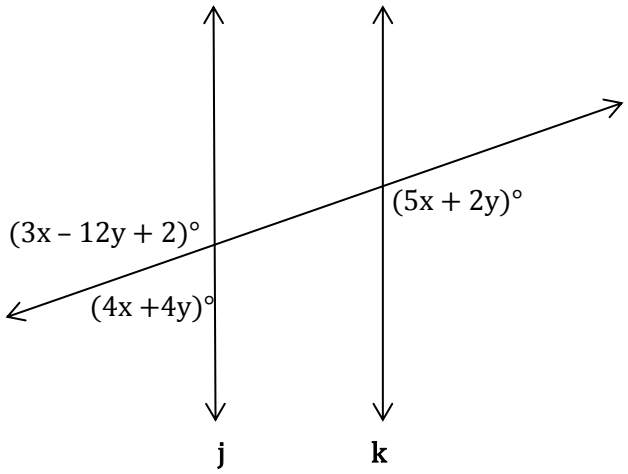


3.2 Given Parallel Lines

Learning Target 3.2a: Given two parallel lines, find an angle measure. 1 2 3 4 5

14) Given j is parallel to k, find...

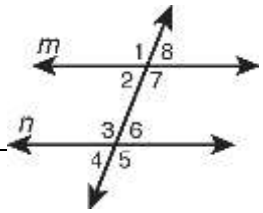
15) Given line j is parallel to line k, find x and y.



Learning Target 3.2b: Given two parallel lines, prove angles congruent 1 2 3 4 5

16) Given: $m \parallel n$

Prove: $\angle 2$ supplementary to $\angle 3$

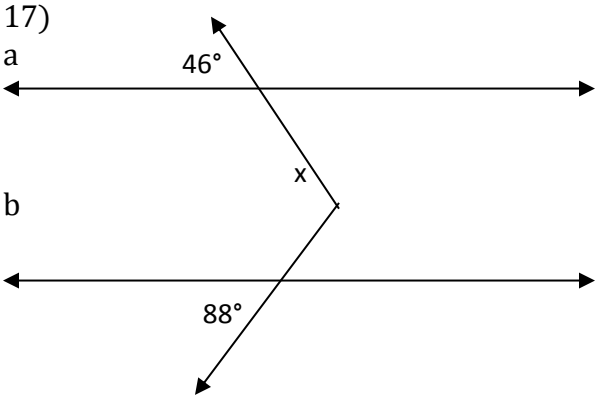


Statements	Reasons

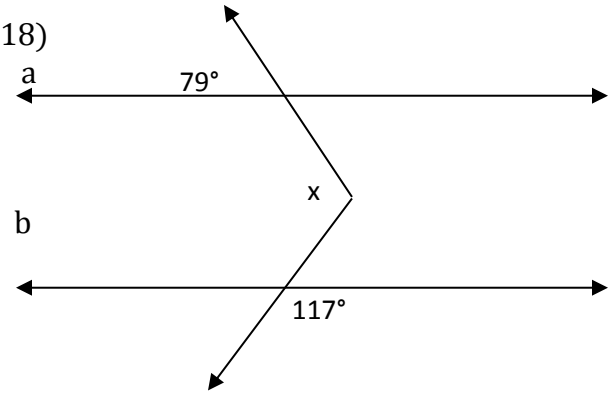
Learning Target 3.2c: Find missing angles in "Crook Problems." 1 2 3 4 5

In each picture, line a is parallel to line b. Find x.

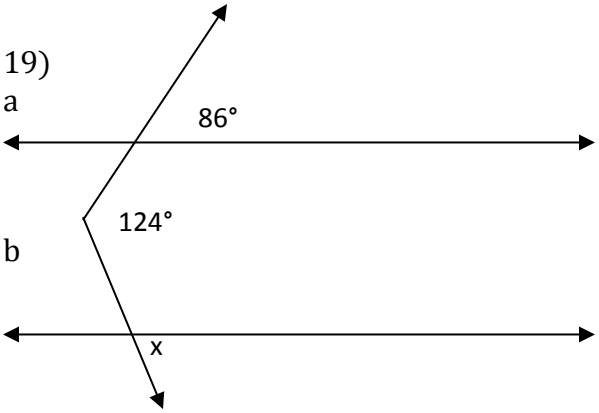
17)



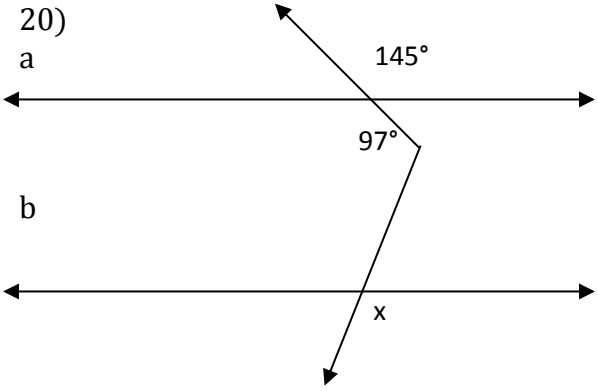
18)



19)



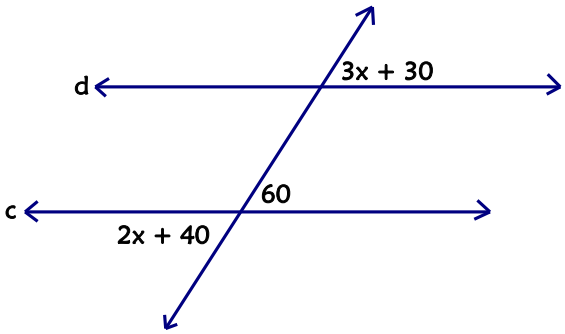
20)



3.3 Prove Parallel Lines

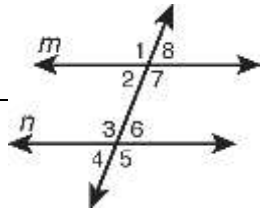
Learning Target 3.3a: Prove lines are parallel algebraically. 1 2 3 4 5

21) Is $c \| d$? Show all of your work to justify your answer. Explain why or why not.



Learning Target 3.3b: Prove lines are parallel in a two-column proof. 1 2 3 4 5

22) Given: $\angle 8$ supplementary to $\angle 3$
Prove: $m \| n$



Statements	Reasons