Lesson 2-2 Parallel lines and transversals – Part 2

Recall in lesson 2-1 that you discovered when two parallel lines are intersected by a transversal there are only different angle measures created. Let’s review which angles are equal when this happens.

Here’s new important vocabulary

Corresponding angles – angles in the same position. For example, ∠1 and ∠5 below are corresponding.

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Part 1 - Review

1) Label the transversal in the figure.

2) Use the proper symbols to show that the other two line segments are parallel.

3) Name all the angles have equal measure in the diagram above.

4) Then name all the angles that are supplementary.

∠­­\_\_\_\_\_\_\_ is equal to ∠­­\_\_\_\_\_\_\_ is equal to ∠­­\_\_\_\_\_\_\_ is equal to ∠­­\_\_\_\_\_\_\_

∠­­\_\_\_\_\_\_\_ is equal to ∠­­\_\_\_\_\_\_\_ is equal to ∠­­\_\_\_\_\_\_\_ is equal to ∠­­\_\_\_\_\_\_\_

∠­­\_\_\_\_\_\_\_ is supplementary to ∠­­\_\_\_\_\_\_\_ is supplementary to ∠­­\_\_\_\_\_\_\_ is supplementary to ∠­­\_\_\_\_\_\_\_

∠­­\_\_\_\_\_\_\_ is supplementary to ∠­­\_\_\_\_\_\_\_ is supplementary to ∠­­\_\_\_\_\_\_\_ is supplementary to ∠­­\_\_\_\_\_\_\_

Part 2 – What if the lines aren’t parallel?

1) Draw two line segments that are **NOT** parallel in the space below.

2) Draw a transversal.

3) Measure all of the angles.

4) What can you conclude about two lines if corresponding angles are not equal?