
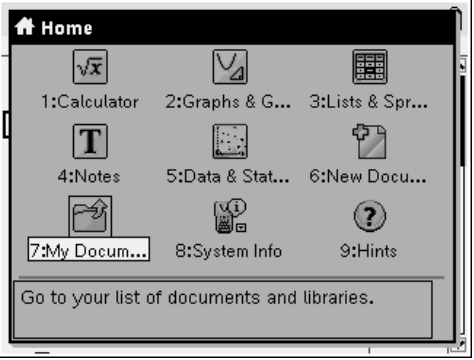

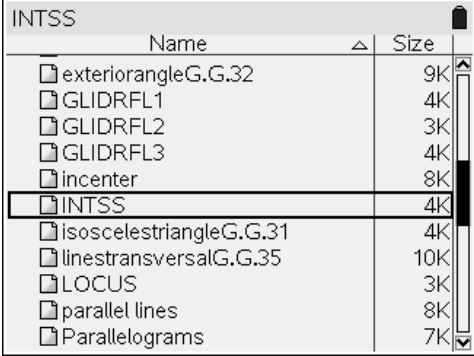

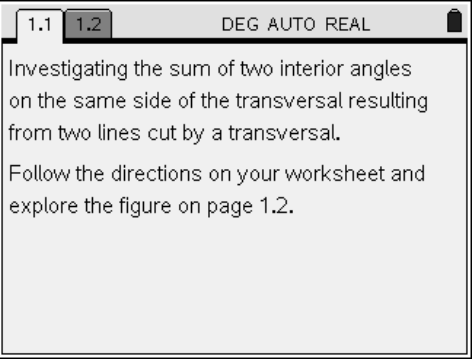

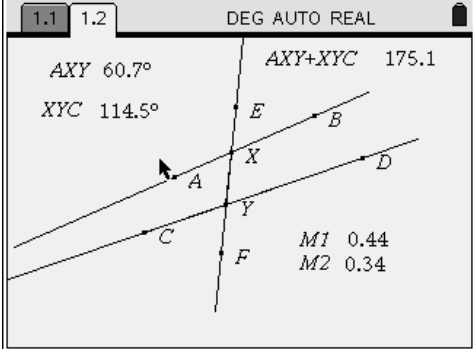


Student Worksheet for G.G. 35 Investigating the sum of two interior angles on the same side of the transversal.

<p>After turning on your handheld press </p> 	<p>Select My documents </p> <p>Open Folder Geometry NY Select INTSS</p> 
<p></p> 	<p></p> 
<p>The measures of $\angle AXY$ and $\angle XYZ$ are shown. The slope of \overline{AB} is M1 and the slope of \overline{CD} is M2</p>	<p>You will explore the figure by grabbing and moving different objects.</p> <p>Answer the following questions and draw conclusions from your explorations.</p>

Investigating $\angle AXY$ and $\angle XYC$:

1. True or False:

- A) $\angle AXY$ and $\angle XYC$ are exterior angles. _____
- B) $\angle AXY$ and $\angle XYC$ are interior angles. _____
- C) $\angle AXY$ and $\angle XYC$ are adjacent angles. _____
- D) $\angle AXY$ and $\angle XYC$ are on opposite sides of transversal \overline{EF} . _____
- E) $\angle AXY$ and $\angle XYC$ are on the same side of transversal \overline{EF} . _____

2. $\angle AXY$ and $\angle XYC$ are _____

- A) alternate exterior angles
- B) interior angles on the same side of the transversal
- C) corresponding angles
- D) alternate interior angles

SELECT, GRAB AND MOVE point C

3. What changes? _____

4. What remains the same ? _____

SELECT GRAB AND DRAG points D, E, F

5. What changes? _____

6. What remains the same ? _____

7. From your observations what seems to be true about \overline{AB} and \overline{CD} when
 $m\angle AXY + m\angle XYC = 180^\circ$?

8. From your observations what seems to be true about \overline{AB} and \overline{CD}
when $M1 = M2$? _____

Fill in the blank:

If two lines are cut by a transversal and the interior angles on the same side of the transversal are supplementary then the lines are _____.

***INTSS**

Name	Size
<input type="checkbox"/> exteriorangleG.G.32	9K
<input type="checkbox"/> GLIDRFL1	4K
<input type="checkbox"/> GLIDRFL2	3K
<input type="checkbox"/> GLIDRFL3	4K
<input type="checkbox"/> incenter	8K
* <input type="checkbox"/> INTSS	4K
<input checked="" type="checkbox"/> INTSS2	4K
<input type="checkbox"/> isoscelestriangleG.G.31	4K
<input type="checkbox"/> linestransversalG.G.35	10K
<input type="checkbox"/> LOCUS	3K
<input type="checkbox"/> parallel lines	8K

Investigating $\angle AXY$ and $\angle XYC$:

1. True or False:

- F) $\angle AXY$ and $\angle XYC$ are exterior angles. _____
- G) $\angle AXY$ and $\angle XYC$ are interior angles. _____
- H) $\angle AXY$ and $\angle XYC$ are adjacent angles. _____
- D) $\angle AXY$ and $\angle XYC$ are on opposite sides of transversal \overline{EF} . _____
- J) $\angle AXY$ and $\angle XYC$ are on the same side of transversal \overline{EF} . _____

2. $\angle AXY$ and $\angle XYC$ are _____

- A) alternate exterior angles
- B) interior angles on the same side of the transversal
- C) corresponding angles
- D) alternate interior angles

SELECT, GRAB AND MOVE point C

9. What changes? _____

10. What remains the same? _____

SELECT GRAB AND DRAG points D, E, F

11. What changes? _____

12. What remains the same? _____

13. From your observations what seems to be true about \overline{AB} and \overline{CD} when $m\angle AXY + m\angle XYC = 180^\circ$?

14. From your observations what seems to be true about \overline{AB} and \overline{CD} when $M1 = M2$? _____

Fill in the blank:

If two parallel lines are cut by a transversal then the interior angles on the same side of the transversal are _____.