
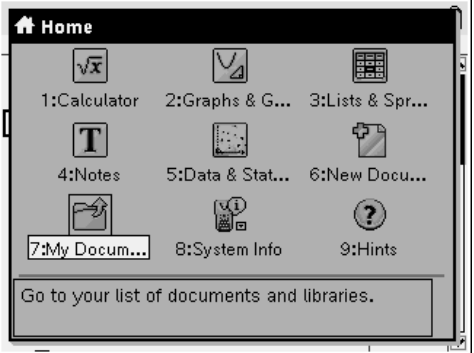


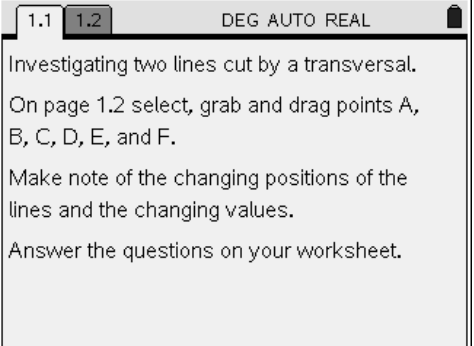

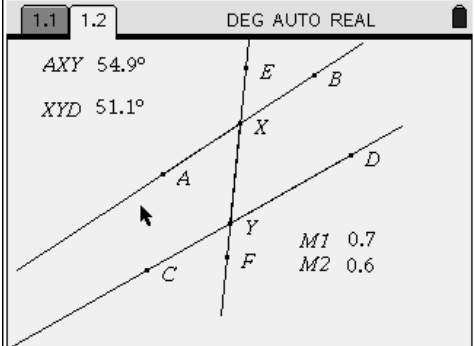


Student Worksheet for G.G. 35 using TI-Nspire

<p>After turning on your handheld press </p> 	<p>Select My documents </p> <p>Open Folder Geometry NY</p> <p>Select ALTINT</p> <table border="1" data-bbox="824 388 1295 737"> <thead> <tr> <th colspan="2">*diamcirarea</th> </tr> <tr> <th>Name</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>8.25.08</td> <td>15K</td> </tr> <tr> <td>Examples</td> <td>212K</td> </tr> <tr> <td>Geometry NY</td> <td>84K</td> </tr> <tr> <td>ALTINT</td> <td>3K</td> </tr> <tr> <td>angles in a triangleG.G.30</td> <td>3K</td> </tr> <tr> <td>anglesandsidetriangleG.G.34</td> <td>3K</td> </tr> <tr> <td>circumcenter</td> <td>9K</td> </tr> <tr> <td>exteriorangleG.G.32</td> <td>9K</td> </tr> <tr> <td>incenter</td> <td>8K</td> </tr> <tr> <td>isoscelestriangleG.G.31</td> <td>4K</td> </tr> <tr> <td>linestransversalG.G.35</td> <td>10K</td> </tr> </tbody> </table>	*diamcirarea		Name	Size	8.25.08	15K	Examples	212K	Geometry NY	84K	ALTINT	3K	angles in a triangleG.G.30	3K	anglesandsidetriangleG.G.34	3K	circumcenter	9K	exteriorangleG.G.32	9K	incenter	8K	isoscelestriangleG.G.31	4K	linestransversalG.G.35	10K
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<p>The measures of $\angle AXY$ and $\angle XYD$ 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 $\angle XYD$:

1. True or False:

- A) $\angle AXY$ and $\angle XYD$ are interior angles. _____
- B) $\angle AXY$ and $\angle XYD$ are on opposite sides of transversal \overline{EF} _____
2. $\angle AXY$ and $\angle XYD$ 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 A

3. What changes? _____

4. What remains the same? _____

SELECT GRAB AND DRAG points B, C, 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 $\angle AXY = \angle XYD$? _____

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 alternate interior angles are equal then the lines are _____.

	<p>7 scroll to ALTINT2</p> <table border="1"> <thead> <tr> <th colspan="2">ALTINT</th> </tr> <tr> <th>Name</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>8.25.08</td><td>15K</td></tr> <tr><td>Examples</td><td>212K</td></tr> <tr><td>Geometry NY</td><td>87K</td></tr> <tr><td>ALTINT</td><td>3K</td></tr> <tr><td>ALTINT2</td><td>4K</td></tr> <tr><td>angles in a triangleG.G.30</td><td>3K</td></tr> <tr><td>anglesandsidetriangleG.G.34</td><td>3K</td></tr> <tr><td>circumcenter</td><td>9K</td></tr> <tr><td>exteriorangleG.G.32</td><td>9K</td></tr> <tr><td>incenter</td><td>8K</td></tr> <tr><td>isoscelestriangleG.G.31</td><td>4K</td></tr> </tbody> </table>	ALTINT		Name	Size	8.25.08	15K	Examples	212K	Geometry NY	87K	ALTINT	3K	ALTINT2	4K	angles in a triangleG.G.30	3K	anglesandsidetriangleG.G.34	3K	circumcenter	9K	exteriorangleG.G.32	9K	incenter	8K	isoscelestriangleG.G.31	4K
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<p>enter</p> <div style="border: 1px solid black; padding: 5px;"> <p>1.1 1.2 DEG AUTO REAL</p> <p>Investigating two parallel lines cut by a transversal.</p> <p>On page 1.2 select, grab and drag points C and D E.</p> <p>Make note of the changing positions of the lines and the changing values.</p> <p>Answer the questions on your worksheet.</p> </div>	<p>ctrl</p> <div style="border: 1px solid black; padding: 5px;"> <p>1.1 1.2 DEG AUTO REAL</p> <p>AXY 56.8°</p> <p>XYD 56.8°</p> <p>M1 0.22</p> <p>M2 0.22</p> </div>																										

1. True or False:

A) $\angle AXY$ and $\angle XYD$ are interior angles. _____

B) $\angle AXY$ and $\angle XYD$ are on opposite sides of transversal \overline{EF} _____

2. $\angle AXY$ and $\angle XYD$ 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 **point D**

5. What changes? _____

6. What remains the same ? _____

Fill in the blank:

7. In this exercise \overline{AB} and \overline{CD} were always _____.

8. If two parallel lines are cut by a transversal then _____
