
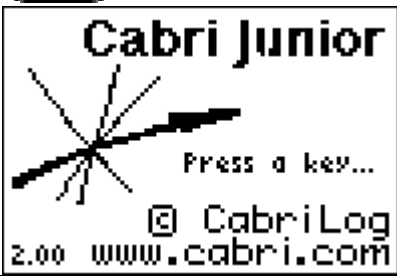

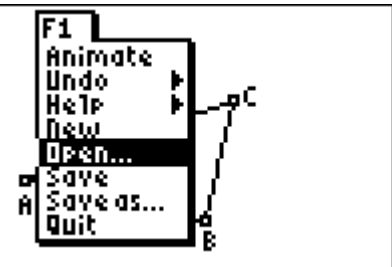
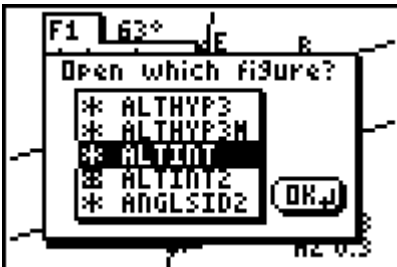
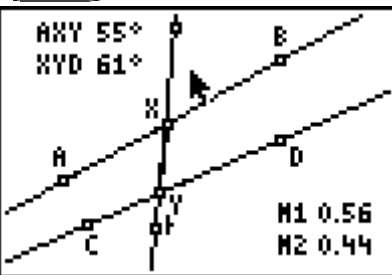


Student Worksheet for G.G. 35 using TI-Nspire

<p>After turning on your handheld press</p> <p><b>APPS</b></p> 	<p>Select Cabri Jr.</p> <p><b>5</b></p> 
<p><b>Y=</b>  scroll down to Open</p> 	<p><b>ENTER</b> scroll to ALTINT</p> 
<p><b>ENTER</b></p>  <p>The measures of <math>\angle AXY</math> and <math>\angle XYD</math> are shown. The slope of <math>\overline{AB}</math> is M1 and the slope of <math>\overline{CD}</math> 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? \_\_\_\_\_


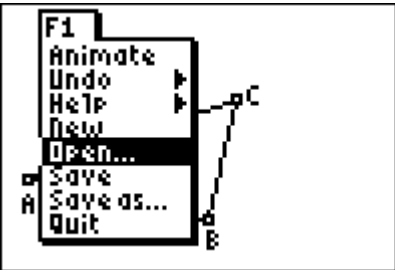
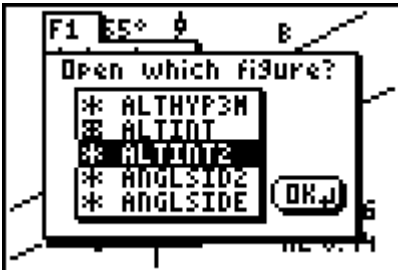
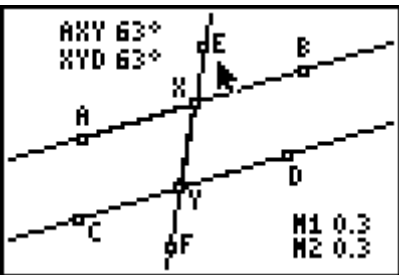
6. What remains the same? \_\_\_\_\_

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>Y=  scroll down to Open</p> 	<p>ENTER scroll to ALTINT2</p> 
<p>ENTER</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>

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 \_\_\_\_\_

\_\_\_\_\_