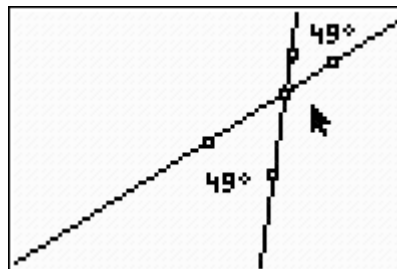


# CABRI™ JR. ACTIVITY 5: INTERSECTING LINES AND VERTICAL ANGLES

## ACTIVITY OVERVIEW:

In this activity we will

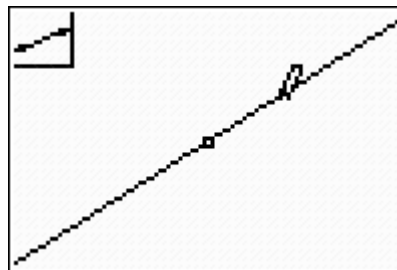
- Draw two intersecting lines
- Measure one pair of vertical angles
- Move a line to change the angles
- Observe the changes in the angle measures



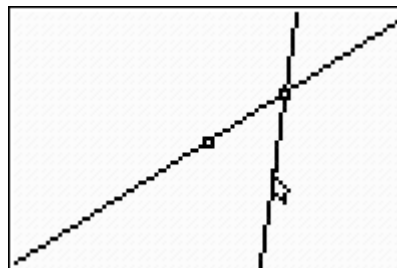
Press **[APPS]**. Move down to the CabriJr APP and press **[ENTER]**. Press **[Y=]** for the F1 menu and select **New**. (If asked to **Save changes?** press **[◀]** **[ENTER]** to choose “No.”)



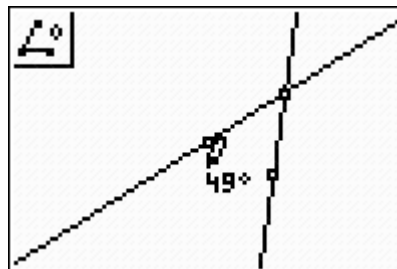
Press **[WINDOW]** for F2 and press **[▼]** **[ENTER]** to select **Line**. Press **[ENTER]** to mark one point on the line. Move the pointer **[▶]** and **[▲]** several times and press **[ENTER]** to mark the other point defining the line.



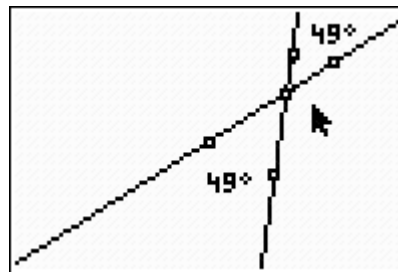
The **Line** tool is still active so press **[ENTER]** again to mark this point as one of the points that will determine another line. Press **[▼]** to move away from that point and press **[ENTER]** to mark the other point on the new line. Press **[CLEAR]** to disable the **Line** tool.



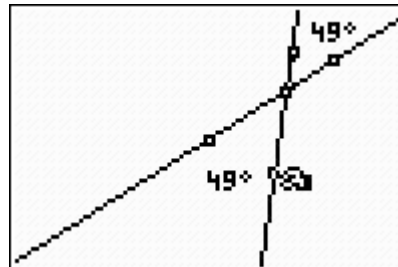
Use F5 to measure the angle formed by the 3 marked points. Move the angle measure to a convenient location and press **[CLEAR]** to deactivate the *hand*.



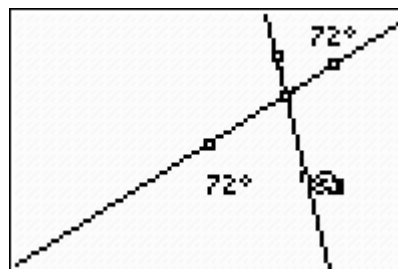
The **Angle Measure** tool is still active so now mark points forming the other vertical angle. You will first mark a point on one line, move to the intersection point, then mark a point on the second line. When the angle measure is displayed it can be moved to a convenient location. Press **CLEAR** to deactivate the *hand*.



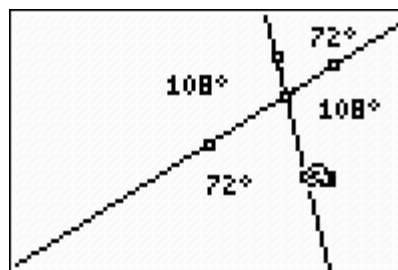
Move the pointer to one of the marked points which defined a line. Press **ALPHA** to grab the point.



Move the point left or right to change the angles formed. Observe that the measures of the vertical angles both change as the angle changes



Extension: Measure the other angles formed by the intersecting lines. Which angles are congruent? Which angles are supplementary?



Exit the APP using F1 and selecting Quit, or by pressing **2nd** **MODE** for **QUIT**.

