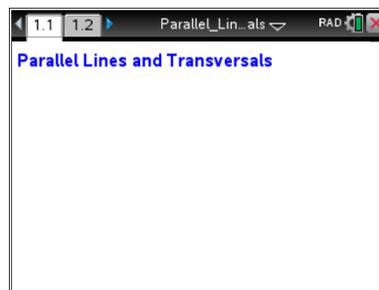


Activity Overview

In this activity, you will create a pair of parallel lines cut by a transversal. You will also measure angles.

Materials

- *Technology needed (TI-Nspire™ handheld, computer software)*

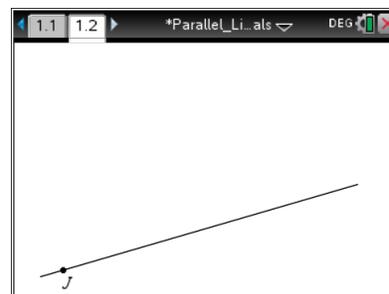


Step 1 Preparing the Document

1. Open a new document by pressing **⏏ on** > **New Document > Add Notes**.
2. Type Parallel Lines and Transversals
Note: To format the text, first select the text by holding down the shift key (**⇧shift**) and pressing the right or left arrow key on the Touchpad. Then, press **Menu > Format > Format text**, and select **B** for bold. Press **esc** to exit **Format text**. To select a color for the text, press **Menu > Format > Text color**. Click the desired color, and then press **⏏** to deselect the text.
3. Press **doc v** > **File > Save**. Type **Parallel_Lines_and_Transversals**. Tab to **[save]**, and press **enter**.
Note: To obtain the underscore, press **ctrl** **_**.
4. To add a Geometry page, press **ctrl** **doc v** > **Add Geometry**.
5. To hide the scale in the right corner of the screen, select **Menu > View > Hide Scale**. Alternatively, right-click (**ctrl** **menu**) on the scale and choose **Hide Scale**.
6. Press **⏏ on** > **Settings > Document Settings**. Select **Fix 0** for display digits and press **enter**. Return to the current document.

Step 2 Drawing a Line

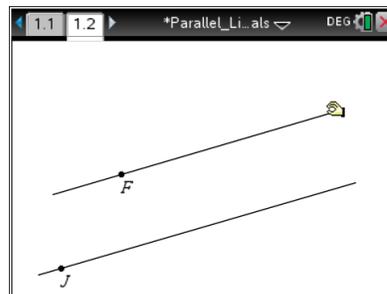
1. Select **Menu > Points & Lines > Line**.
2. Move the cursor to a location toward the bottom of the page and press **⏏**. This will place a point on the page. Immediately press **⇧shift** **J** to label the point.
3. Move the cursor to the right and press **⏏** to create the line.
4. Press **esc** to exit the **Line** tool.





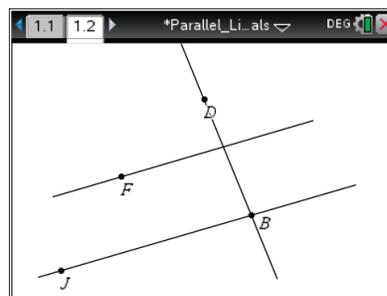
Step 3 Drawing a Line Parallel to a Given Line

1. Select **Menu > Construction > Parallel**.
2. Move the cursor to the line through point J and to select the line. A ghosted line parallel to the line through point J will appear.
3. Move the cursor away and up from the line through point J . Press to identify a point and drop the line. Then immediately press **F** to label the point. Press .
4. Move the cursor so that you can grab the right end of the line and pull it to the length that you desire. Press .



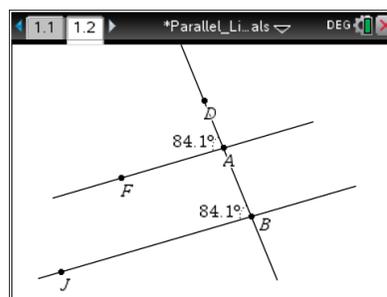
Step 4 Drawing a Transversal

1. Select **Menu > Points & Lines > Line**.
2. Place a point above the top line by pressing . Immediately press **D** to label the point.
3. Drag the cursor until a new point appears on the bottom line. (It will say *point on*.) Press . Immediately press **B** to label the point.
4. Press to exit the **Line** tool.



Step 5 Measuring Angles

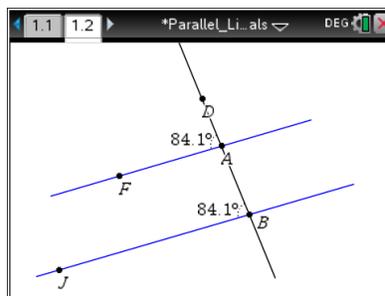
1. Select **Menu > Measurement > Angle**.
2. Click on point D . Move the cursor toward the intersection with the line containing point F until the text reads *intersection point*. Press and then immediately press **A**. Move the pencil to point F and press .
3. Measure $\angle JBA$ by first clicking on point J , then point B , and finally on point A .
4. Press to exit the **Angle** tool.





Step 6 Changing the screen

1. Move the cursor to the angle measure until the word *text* appears.
2. Press **ctrl** . Use the arrows to drag the measure to the interior of the angle.
3. Press to place the angle measure.
4. If using the TI-Nspire™ CX, the color of the lines can be changed. To change the color to the parallel lines, right-click (**ctrl** **menu**) on each parallel line. Select **Color > Line Color**. Choose a color. Then press **esc**.



Step 7 Saving the Document

1. Press **ctrl** **S**.

