Name: _____   Date: _____

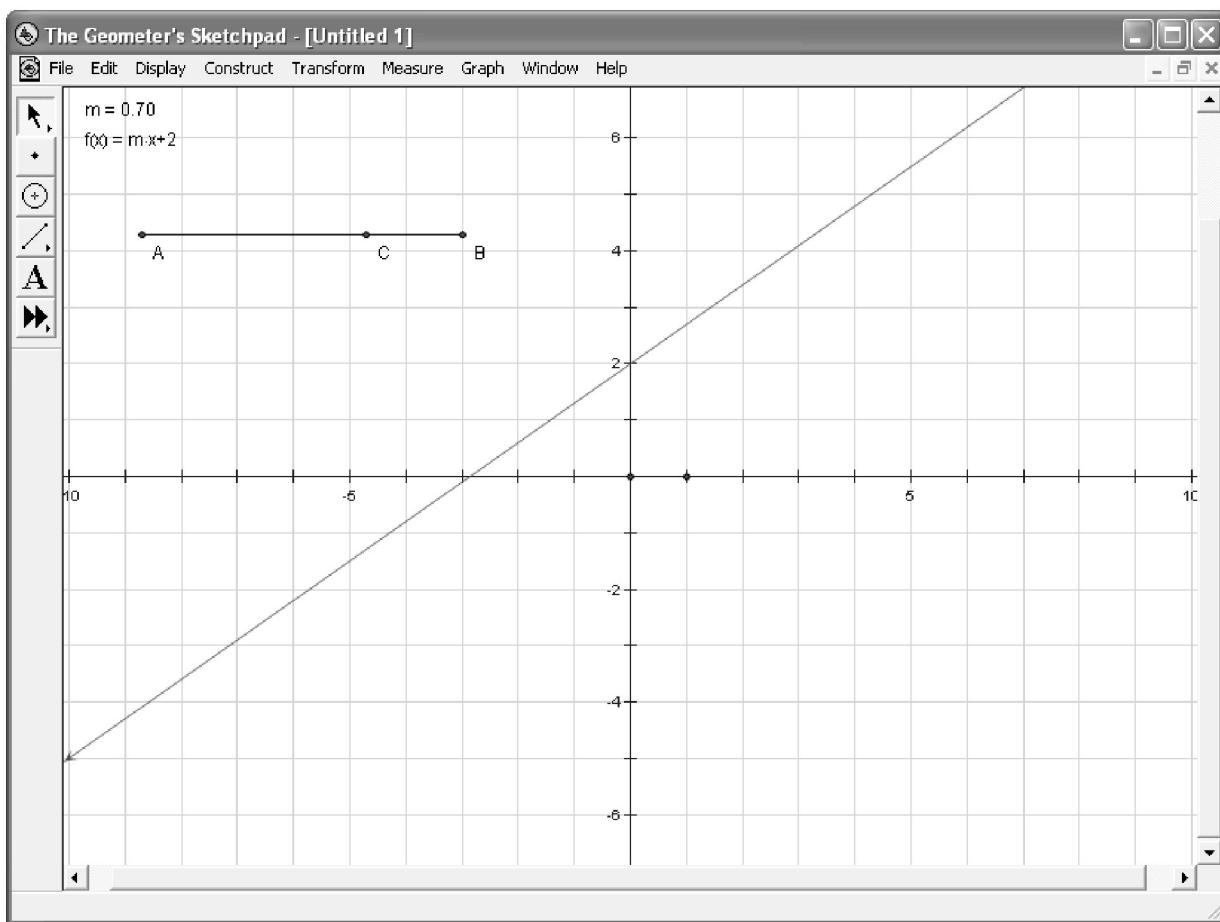# Use Technology: Using a Slider

Using *The Geometer's Sketchpad*®, you can control the graph of a line using a slider.

On the **Edit** menu, click **Preferences**. Click the **Text** tab, and select **For All New Points**. Click **OK**.

Draw a line segment AB as shown. Draw a point C on the segment AB. Ensure that all objects are deselected. Select A, B, and C in order. On the **Measure** menu, click **Ratio**. Move point C back and forth, and observe what happens to the value of the ratio $\dfrac{AC}{AB}$. Change the label of the ratio to **m**. You will use this ratio to control the slope of a line.

On the **Graph** menu, click **New Function**. When the **New Function** dialog box appears, click the measure **m**. Then, use the keypad to add *x + 2. Click **OK**.

On the **Graph** menu, click **Plot Function**. Move point C back and forth. Note what happens to the function.

You can also right-click the point C, and click **Animate Point** to move C back and forth.