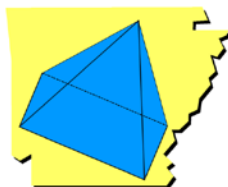


# **GEOMETRY AT ITS BEST**



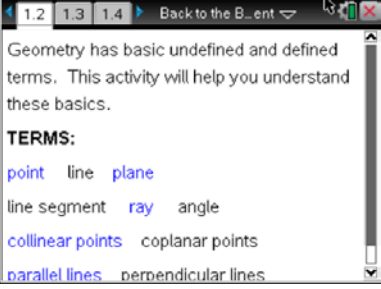
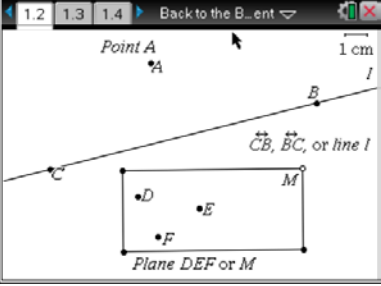
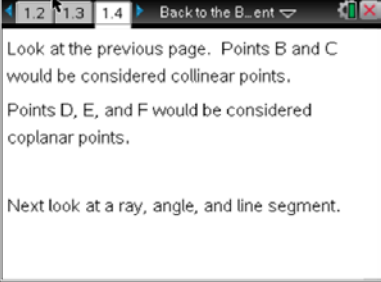
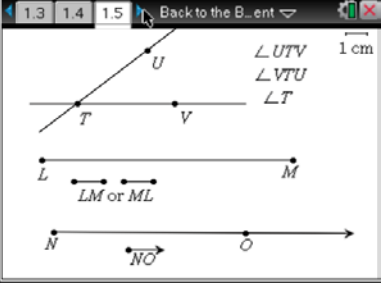
**“Back to the Basics”**

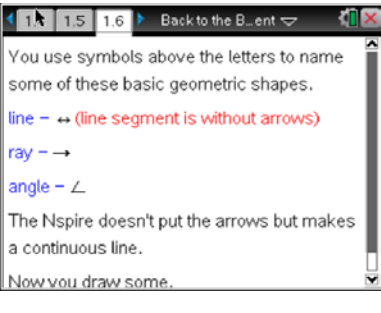
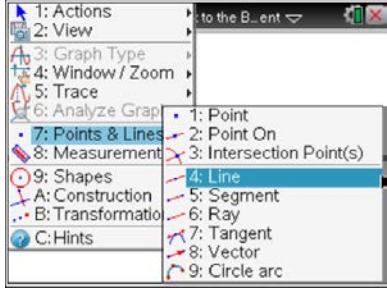

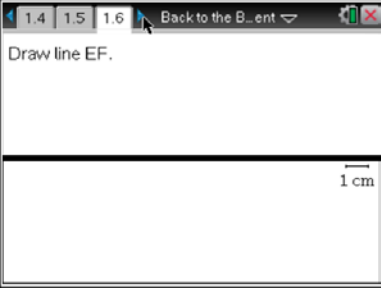
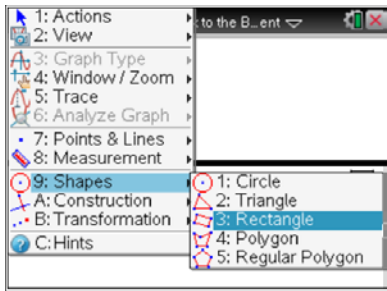

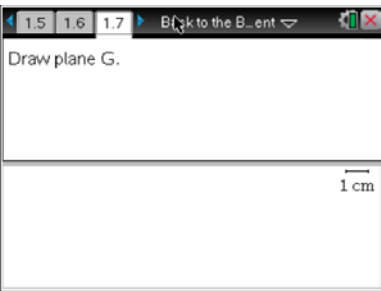
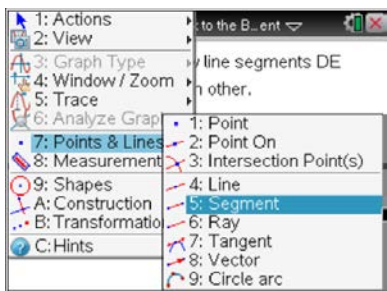


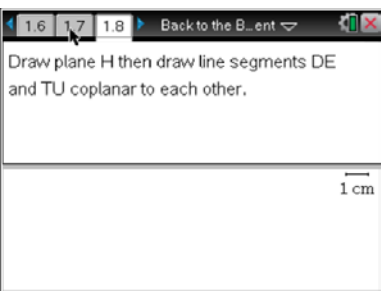
## Table of Contents:

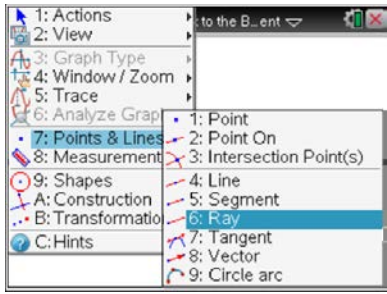
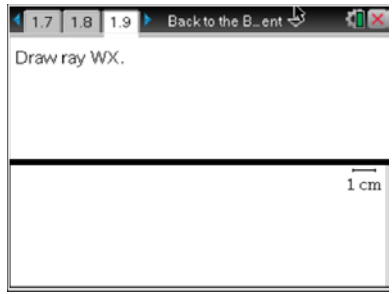
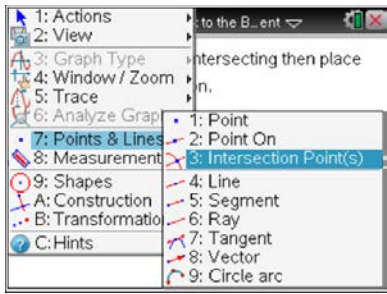
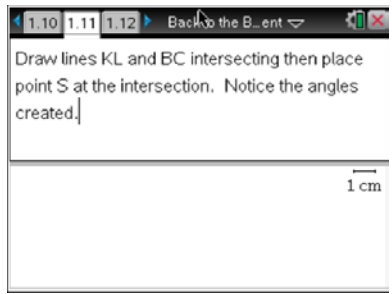
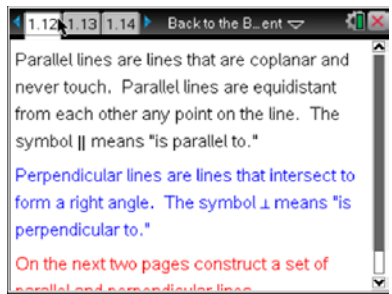
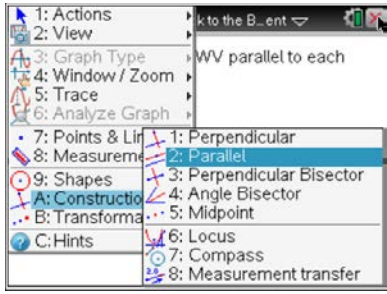
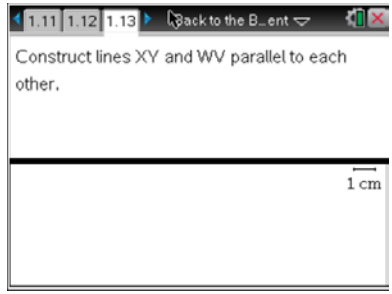
Introduction and definitions	3
Drawing Practice	4

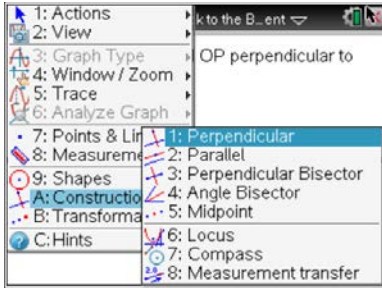
**OBJECTIVE:**


In this activity students learn and use the basic undefined terms and defined terms of geometry.

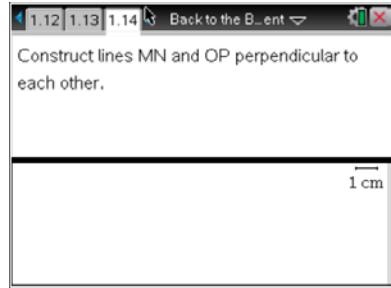
	<p>This page tells what the activity is about. Press (ctrl)▶ to go to the next page.</p>	
	<p>Points, lines, and planes are known as the undefined terms of geometry. We use their attributes to describe and illustrate them.</p>	
	<p>Collinear points and coplanar points are basic concepts in geometry that must also be commonly understood without being defined. (ctrl)◀ takes you to the previous page.</p>	
	<p>Line segments and rays are pieces of a line. Line segments have endpoints. Rays have an initial point. Angles are two rays that have the same initial point.</p>	

	<p>You must know all symbols for naming geometric shapes. Misplacing an arrow could cost you points.</p>	
	<p>Make sure you click in the drawing portion of the screen. To draw a line press (menu) then click <b>Points &amp; Lines &gt; Line</b>. Press  to set each point. To attach a letter to a point just type the letter right after you set a point. You do not have to go back to the menu to draw again unless you want to draw something different.</p>	
	<p>To draw a plane press (menu) then click <b>Shapes &gt; Rectangle</b>. Press  to set three of the points. You will notice that the fourth point will automatically appear.</p>	
	<p>Use the steps above to draw your plane. Make sure to draw the plane big enough to hold the line segments. To draw a line segment press (menu) then click <b>Points &amp; Lines &gt; Segment</b>. Press  to set the points. You can change the size of your plane or line by moving to one of the points. The hand will appear. Press (ctrl)  to grab the point. Use the touchpad to drag the point to a different location.</p>	

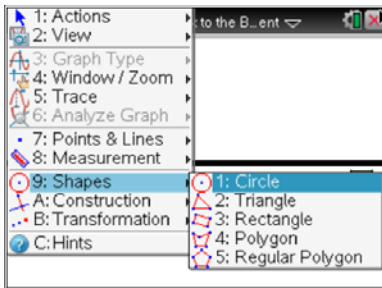
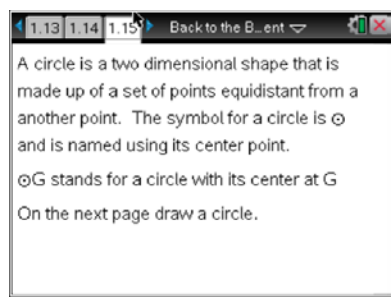
	<p>To draw a ray press <b>(menu)</b> then click <b>Points &amp; Lines &gt; Ray</b>. Press <b>(R)</b> to set the points. You can also use the <b>Vector</b> option to create a ray.</p>	
	<p>Use the steps you have learned to create two lines that intersect. To place a point on the intersection of two lines press ray press <b>(menu)</b> then click <b>Points &amp; Lines &gt; Intersection Point(s)</b> then click on each line. This is the only way to make sure the point is actually on the intersection. Just drawing a point will not guarantee the intersection.</p>	
	<p>Some shapes are constructed rather than just drawn such as parallel and perpendicular lines.</p>	
	<p>To construct parallel lines first draw a line and a point not on the line. Next press <b>(menu)</b> and click <b>Construction &gt; Parallel</b>. Click on the line then click the point. The line that appears is parallel to the original line</p>	






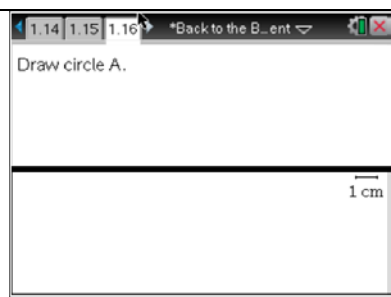
To construct perpendicular lines first draw a line and a point not on the line. Next press  and click **Construction > Perpendicular**. Click on the line then click the point. The line that appears is perpendicular to the original line



One shape that is not a polygon like a rectangle and square is a circle.



To draw a circle press  then click **Shapes > Circle**. Press  to set the center point then click  again to set the distance from the center to the set of points, or radius.



Notes:

