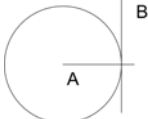
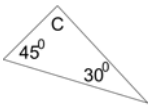

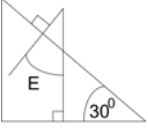
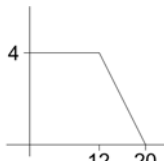


## Basic Geometry

Geometry in beginning Physics focuses heavily on lines, rectangles, triangles, and circles. You must know the following.

- How to find the slope of a line in graph
- How find alternate interior angles when one line cuts through two parallel lines
- How to find the area of a rectangle
- How to find the area of a triangle
- How the interior angles of a triangle add up
- How to find the radius of a circle from the diameter and vice versa
- How to find the circumference and area of a circle

**Problem Set:** Solve the following geometric problems

<p>a. Line B touches the circle at a single point. Line A extends through center of the circle. Complete the sentence to the right.</p>		<p>Line B is _____ to the circle and _____ to line A.</p>
<p>b. What is the value of angle C?</p>		
<p>c. The two horizontal lines are parallel. What is the value of angle D?</p>		
<p>d. How large is angle E?</p>		
<p>e. The radius of a circle is 5.5 cm. What is the circumference in meters? (requires conversion)</p>		
<p>f. The radius of a circle is 5.5 cm. What is its area in square meters? (This requires a unit conversion. Be careful! Conversions with area and volume are especially tricky since the conversion factors are squared for area and cubed for volume. The best way is to convert the radius to meters before using it in the formulas for area or volume. Then you avoid a mess.)</p>		
<p>g. What is the area under the graph at the right?</p>		
<p>h. Find the slope of the line between 12 and 20 in the graph above in part "g".</p>		