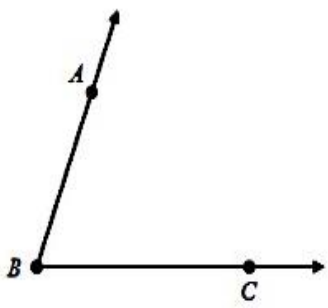
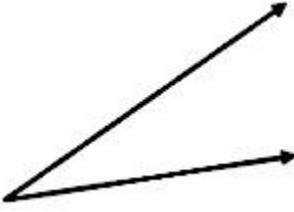
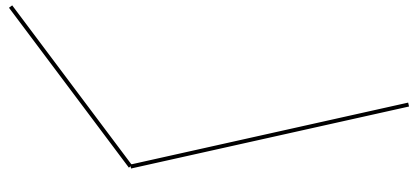


7C Constructing Angles

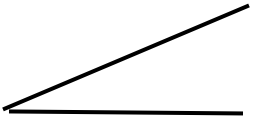

Name: _____ Per: _____

SHOW YOUR WORK FOR FULL CREDIT. NO WORK IN PEN.

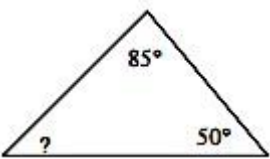
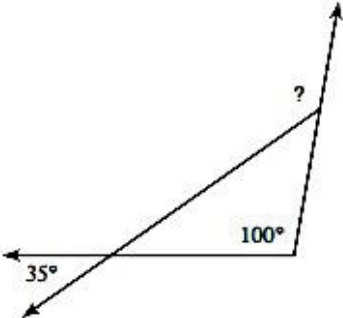
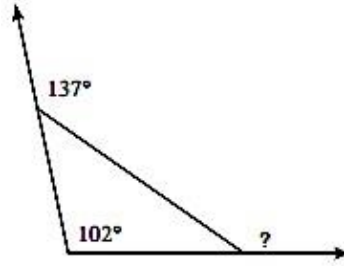
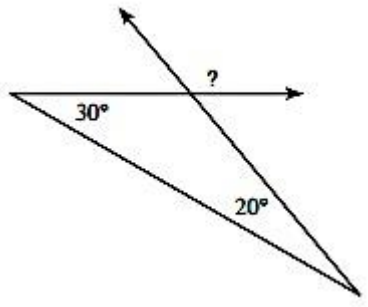
Construct congruent copies of the following angles. Use **a compass and straight-edge only**. Show all markings.

<p>1.</p> 	<p>2.</p> 
<p>3.</p> 	<p>E.C. Construct a mirror copy of #3</p>

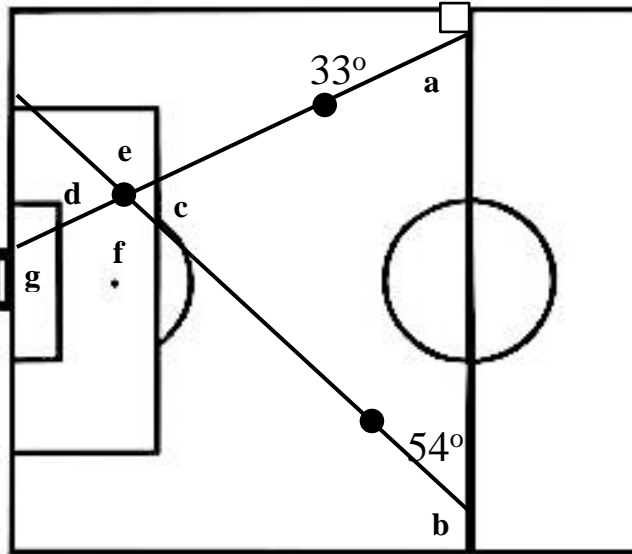
Construct a congruent angle onto the line segment given. Describe how you constructed the angle.

<p>4.</p>  	<p>5. _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
--	---

Find the missing angles below. (Hint: how many degrees are in a triangle? Start with what you know.)

<p>6.</p> 	<p>7.</p> 	<p>8.</p> 	<p>9.</p> 
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10. The following diagram is of a soccer field. **Find the missing angles. Justify your answers.** (The center line is parallel with the baseline).



a. _____ Why? _____

b. _____ Why? _____

c. _____ Why? _____

d. _____ Why? _____

e. _____ Why? _____

f. _____ Why? _____

Extra Credit:

g. _____ Why? _____

11. **Find the equations** for a line using the given information. (Yes, you do know how to do this. See unit 1.)

	PARALLEL (What do you know about the slopes of parallel lines?)	PERPENDICULAR (What do you know about the slopes of perpendicular lines?)								
a Equation: $y = 2x + 1$	Parallel to the given equation and through the point (5, 4)	Perpendicular line through the point (5, 4)								
b. <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>x</td> <td>y</td> </tr> <tr> <td>-1</td> <td>-6</td> </tr> <tr> <td>1</td> <td>-14</td> </tr> <tr> <td>2</td> <td>-18</td> </tr> </table>	x	y	-1	-6	1	-14	2	-18	Parallel to the line from the table and through the point (7, 2)	Perpendicular to the line from the table through the point (7, 2)
x	y									
-1	-6									
1	-14									
2	-18									

12. If angles A and B are **supplementary** angles and **angle A is five times as large as angle B**. Find the measure of each angle. Use systems of equations to solve. SYW!

a. Write two equations.

b. Solve the system.

c. What is the measure of angle A. _____ What is the measure of angle B. _____

13. Angles A and B are **corresponding** angles. Angle A = $(2x + 60)^\circ$ and B = $(4x + 20)^\circ$. Solve and find the measure of the angles A and B.