


Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 CC Geometry - Unit 1 Jacknis/

**Part I: Vocabulary**  
 List all the important vocabulary/key terms from unit 1.



- line
- point
- adjacent  $\angle$ 's
- linear pair
- corresponding  $\angle$ 's
- complementary  $\angle$ 's
- supplementary  $\angle$ 's
- isosceles  $\Delta$
- ray
- Theorem
- postulate
- alt. int.  $\angle$ 's
- alt ext  $\angle$ 's
- vertical  $\angle$ 's
- transversal
- perpendicular
- $\cong$  segments
- Auxiliary line
- parallel
- line segment
- midpoint
- ext.  $\angle$  theorem
- Rt  $\angle$
- Same Side Interior
- Angles at a point
- Degree

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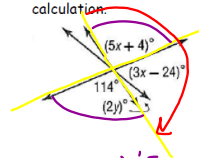
**Part II: Unit Topics**  
 List the aims from this unit 1.

- Mixed angles and triangles
- angles and lines at a point
- transversals/unknown  $\angle$ 's/auxiliary lines
- Unknown angles &  $\angle$ 's in a  $\Delta$
- relationships in  $\Delta$ 's

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**Part III: Examples**

1) Find the value of each variable. State the geometric reasons for each calculation.

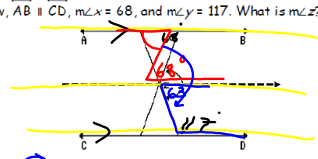


Vertical  $\angle$ 's  
 $114 = 5x + 4$   
 $110 = 5x$   
 $x = 22$

Consec. adj  $\angle$ 's on a line sum to 180  
 $5x + 4 + 3x - 24 + 2y = 180$   
 $5(22) + 4 + 3(22) - 24 + 2y = 180$   
 $y = 12$

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2) In the diagram below,  $\overline{AB} \parallel \overline{CD}$ ,  $m\angle x = 68$ , and  $m\angle y = 117$ . What is  $m\angle z$ ?

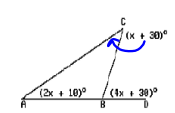


A) 117      B) 131      C) 49      D) 112

68 + 63

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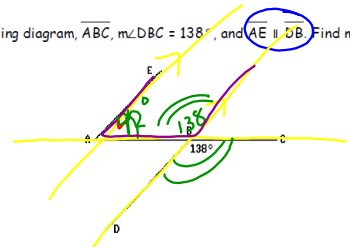
3) In the accompanying diagram of  $\Delta ABC$ , side  $\overline{AB}$  is extended to D. If  $m\angle ACB = (x + 30)^\circ$ ,  $m\angle CAB = (2x + 10)^\circ$ , and  $m\angle CBD = (4x + 30)^\circ$ , what is the value of  $x$ ?



$2x + 10 + x + 30 = 4x + 30$   
 $3x + 40 = 4x + 30$   
 $10 = x$

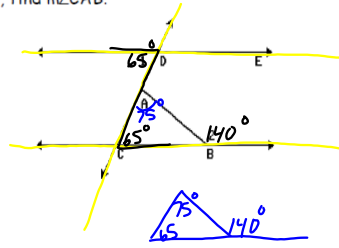
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4) In the accompanying diagram,  $\overline{ABC}$ ,  $m\angle DBC = 138^\circ$ , and  $\overline{AE} \parallel \overline{DB}$ . Find  $m\angle EAB$ .



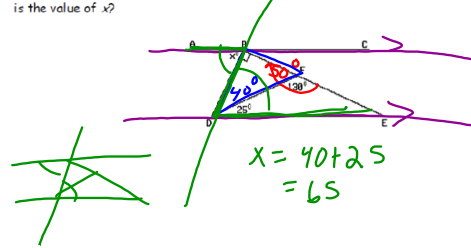
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5) In the accompanying diagram,  $\overline{DE} \parallel \overline{CB}$  and  $\overline{CD}$  is a transversal. If  $m\angle 1 = 65$  and  $m\angle 2 = 140$ , find  $m\angle CAB$ .



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6) In the accompanying diagram,  $\overline{ABC} \parallel \overline{DE}$ ,  $m\angle FDE = 25$ ,  $m\angle DFE = 130$ , and  $m\angle ABD = x$ . What is the value of  $x$ ?



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**Part IV: Tips and Reminders**

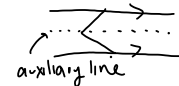
- highlight & extend // lines
- State reasons as you go (Know vocab)
- charge your calc.
- Pencils, highlighters

**Format**

- Matching
- Mult. choice
- Short answer

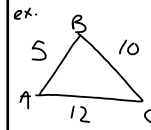
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**Vertical  $\angle$ 's**



**Perpendicular lines**

$\perp$  form  $90^\circ \angle$ 's



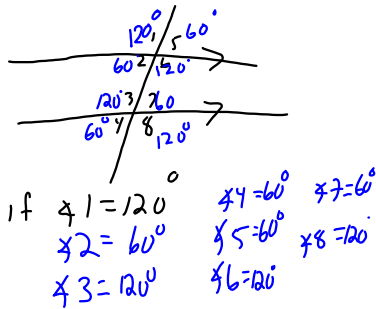
$\angle C \neq \angle A + \angle B$



If 2 sides of a  $\triangle$  measure 5 and 14, write an inequality to represent what the third side of a  $\triangle$  could be

$14 - 5 = 9 \quad 9 < x < 19$   
 $14 + 5 = 19$

Sep 16-12:07 PM



Sep 16-12:12 PM