Name: **Key**   Date: _____   Class: _____

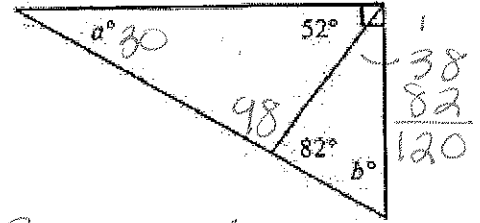Interior and Exterior Angles Homework ADV

1. Find a and b.

$\dfrac{180}{-86}$ 94

$94 + 55 + a = 180$
$-149 \quad -149$
$a =$
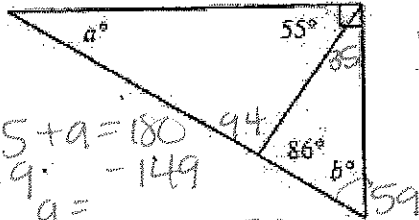
$b + 35 + 86 = 180$
$b + 121 = 180$
$\quad -121 \quad -121$
$b = 59$

m∠a __31__   m∠b __59__

2. Find a and b. ¹⁰⁰

$\dfrac{98}{52}$ / 100

$\begin{array}{r} 38 \\ 82 \\ \hline 120 \end{array}$

m∠a __30__   m∠b __60__

3. Find a and b.
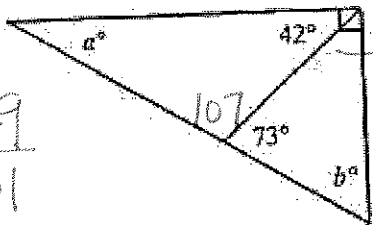
$\dfrac{180}{-149}$
31

$\begin{array}{r} 48 \\ +73 \\ \hline 121 \end{array}$

m∠a __31__   m∠b __59__

4. Find the measure of each interior and exterior angle.
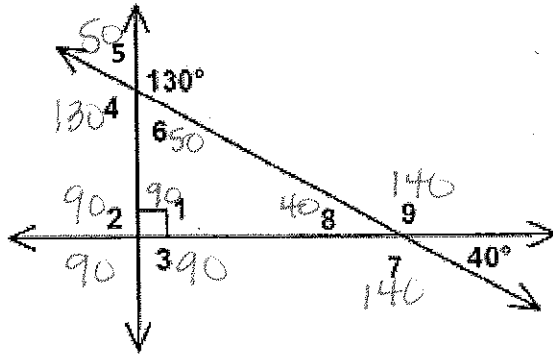
Answers for number 4:
m∠1 __90__
m∠2 __90__
m∠3 __90__
m∠4 __130__
m∠5 __50__
m∠6 __50__
m∠7 __140__
m∠8 __40__
m∠9 __140__

5. A ladder is against a building. The angle it makes with the ground is twice the angle it makes with the building. How large is the exterior angle formed between the ground and the ladder?

$30 = $ /x
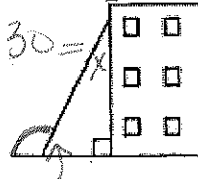
$2x = 60$

$2x + x + 90 = 180$
$\dfrac{3x}{3} = \dfrac{90}{3}$
$x = 30$

$\underline{120°}$