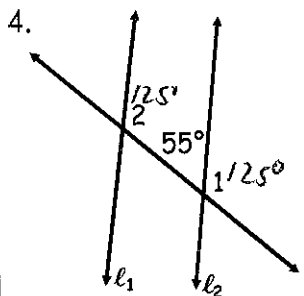
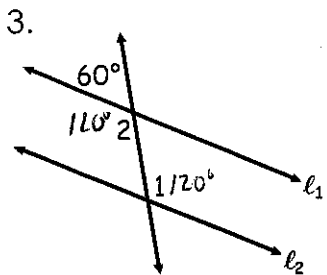
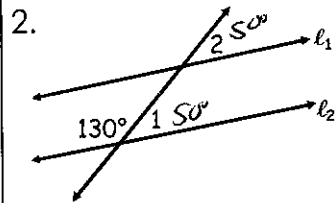
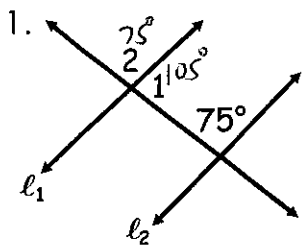


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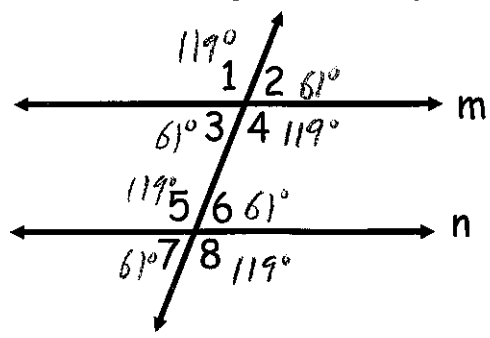
Parallel Lines and Transversals Practice

In problems 1 - 4, assume that $l_1 \parallel l_2$. Find the measures of $\angle 1$ and $\angle 2$.



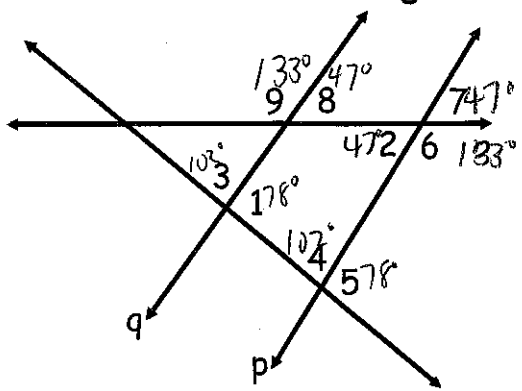
5. Given $m \parallel n$ and $m\angle 8 = 119^\circ$, find the measures of all the numbered angles in the figure.

$m\angle 1 = 119^\circ$, $m\angle 2 = 61^\circ$, $m\angle 3 = 61^\circ$
 $m\angle 4 = 119^\circ$, $m\angle 5 = 119^\circ$, $m\angle 6 = 61^\circ$, $m\angle 7 = 61^\circ$



6. Given $p \parallel q$, $m\angle 1 = 78^\circ$, and $m\angle 2 = 47^\circ$, find the measures of all the numbered angles.

$m\angle 3 = \underline{\hspace{2cm}}$, $m\angle 4 = \underline{\hspace{2cm}}$, $m\angle 5 = \underline{\hspace{2cm}}$, $m\angle 6 = \underline{\hspace{2cm}}$
 $m\angle 7 = \underline{\hspace{2cm}}$, $m\angle 8 = \underline{\hspace{2cm}}$, $m\angle 9 = \underline{\hspace{2cm}}$



In problems 7 - 10, assume $a \parallel b$. Find the value of x .

7.

$3x - 50 = 2x - 5$
 $x - 50 = -5$
 $x = 45$

8.

$2x + 8x + 12 = 180^\circ$
 $10x + 12 = 180$
 $10x = 168$
 $x = 16.8$

9.

$4x + 22 = 90$
 $4x = 68$
 $x = 17$

10.

57°
 57°
 $3x - 9 = 123$
 $3x = 132$
 $x = 44$

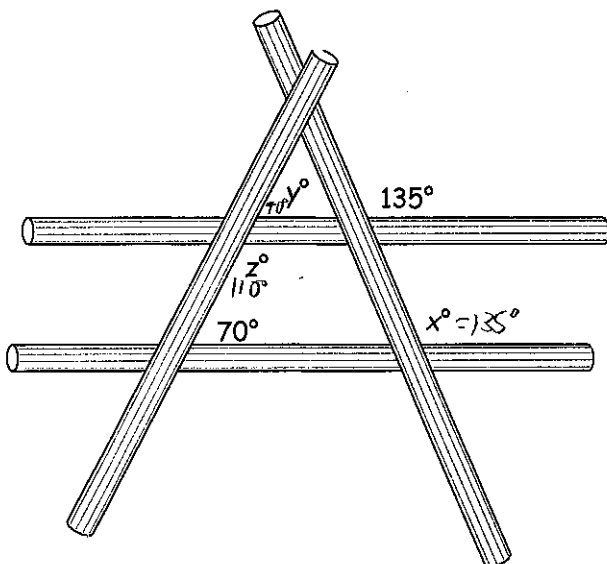
In problems 11 & 12, $\overline{AB} \parallel \overline{CD}$, find the measure of each numbered angle.

11.

12.

Jane and Opal were playing around with straws after lunch. They made the designs below with parallel straws. Find the missing variables.

13. Jane's Design:



14. Opal's Design:

