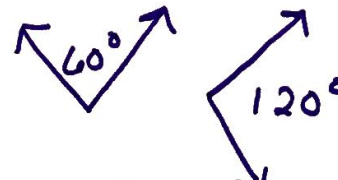
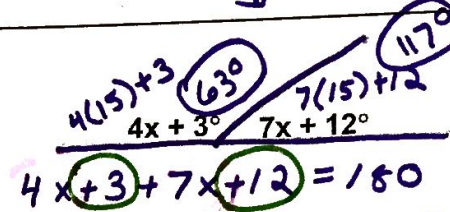
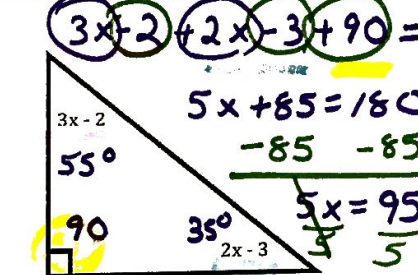
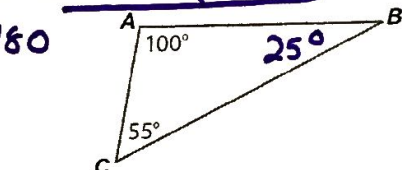
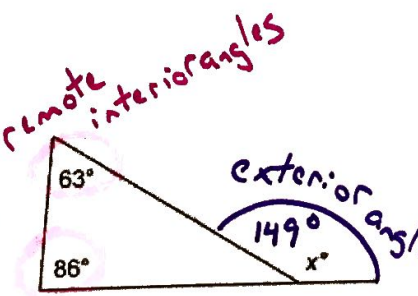
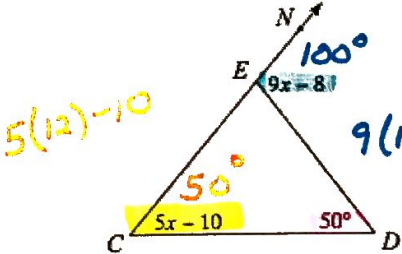


Lesson 5 Summary: Notes

<p>Supplementary Angles:</p>	<p>2 angles that add to equal 180°</p>	
<p>Linear Pair:</p>	<p>2 angles that touch to form a straight line</p>	 $4x + 3 + 7x + 12 = 180$ $11x + 15 = 180$ $\begin{array}{r} 11x + 15 = 180 \\ -15 \quad -15 \\ \hline 11x = 165 \\ \hline x = 15 \end{array}$
<p>Triangle Sum Theorem: the sum of 3 interior angles of a triangle is 180°</p>	 $3x - 2 + 2x - 3 + 90 = 180$ $5x + 85 = 180$ $\begin{array}{r} 5x + 85 = 180 \\ -85 \quad -85 \\ \hline 5x = 95 \\ \hline x = 19 \end{array}$ $3(19) - 2 = 55^\circ$ $2(19) - 3 = 35^\circ$	 $\angle A + \angle B + \angle C = 180^\circ$ $100 + \angle B + 55 = 180$ $\angle B + 155 = 180$ $\begin{array}{r} \angle B + 155 = 180 \\ -155 \quad -155 \\ \hline \angle B = 25 \end{array}$
<p>Exterior Angle Theorem: the sum of the two remote interior angles equals the exterior angle.</p>	 <p>remote interior angles</p> <p>exterior angle</p> $86 + 63 = x$ $149 = x$	<p>Find $m\angle NED$.</p>  $5(12) - 10 + 50 = 9x - 8$ $5x - 10 + 50 = 9x - 8$ $\begin{array}{r} 5x + 40 = 9x - 8 \\ -5x \quad -5x \\ \hline 40 = 4x - 8 \\ +8 \quad +8 \\ \hline 48 = 4x \\ \hline x = 12 \end{array}$

$x = 15$

$x = 12$