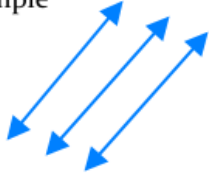
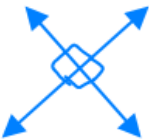
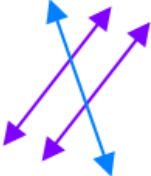


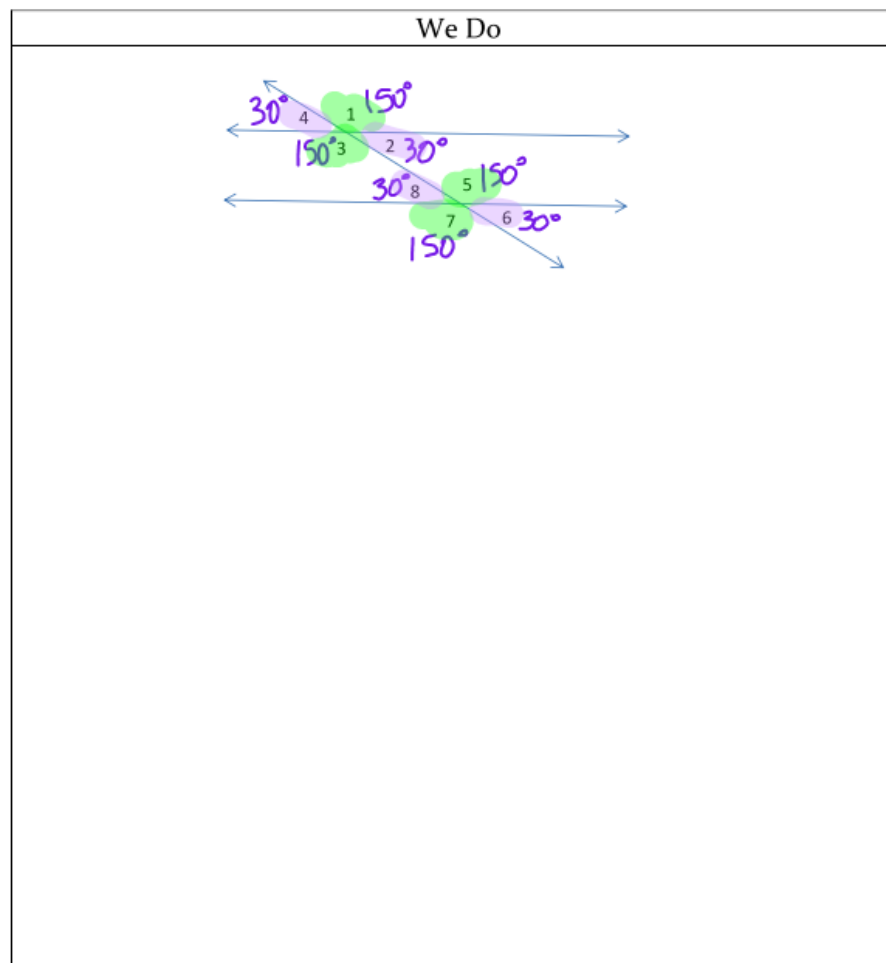
Lesson 5-2

<p><i>parallel lines</i> //</p>	<p>Decode</p>
<p>Definition a set of lines that never intersect</p>	<p>Example</p> 
<p><i>perpendicular lines</i> ⊥</p>	<p>Decode</p>
<p>Definition two lines that intersect ∠ 90°</p>	<p>Example</p> 
<p><i>transversal</i></p>	<p>Decode trans · ver · sal</p>
<p>Definition a line that intersects two parallel lines</p>	<p>Example</p> 

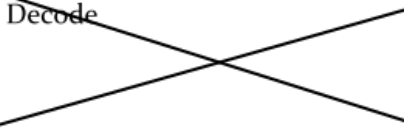
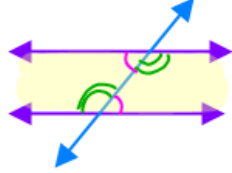
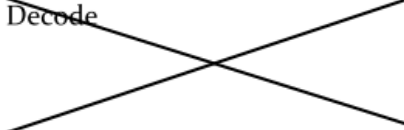
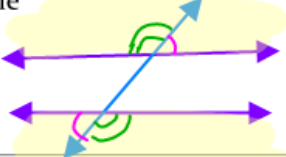
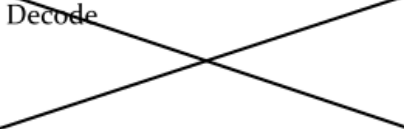
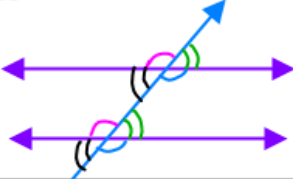
Lesson 5-2

Example 1: Identifying Congruent Angles Formed by a Transversal

Measure the angles formed by the transversal and the parallel lines.
Which angles appear to be congruent?



Lesson 5-2

<p><i>alternate interior</i></p>	<p>Decode</p> 
<p>Definition</p> <ul style="list-style-type: none"> * inside the // lines * opp. sides of the transversal * congruent 	<p>Example</p> 
<p><i>alternate exterior</i></p>	<p>Decode</p> 
<p>Definition</p> <ul style="list-style-type: none"> * outside the // lines * opp. sides of transversal * congruent 	<p>Example</p> 
<p><i>corresponding angles</i></p>	<p>Decode</p> 
<p>Definition</p> <p>the same relative corner</p>	<p>Example</p> 

Lesson 5-2

Example 2: Finding Angle Measures of Angles Formed by Transversals

In the figure, line a is parallel to line b . Find the measure of each angle. Justify your answer.

We Do	
A)	Find $m\angle 1 = 105^\circ$ b/c vertical angles
B)	Find $m\angle 8 = 75^\circ$ b/c supplementary angles $\begin{array}{r} 180 \\ -105 \\ \hline 75^\circ \end{array}$
C)	Find $m\angle 2 = 75^\circ$ b/c supplementary angles
D)	Find $m\angle 5 = 105^\circ$ b/c corresponding angles