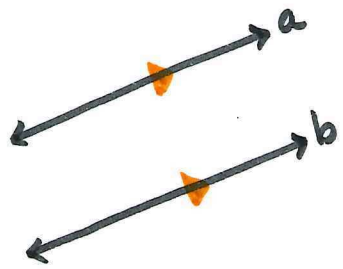
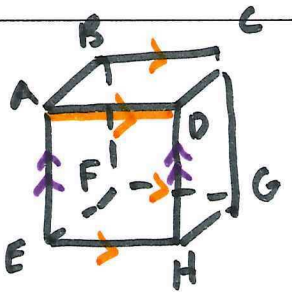
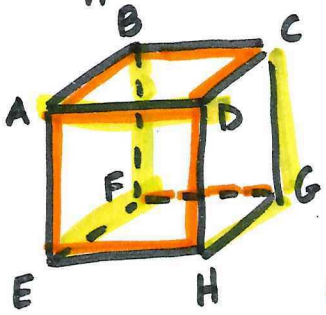
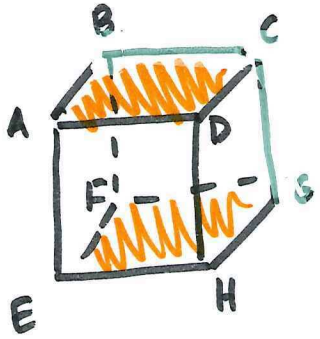
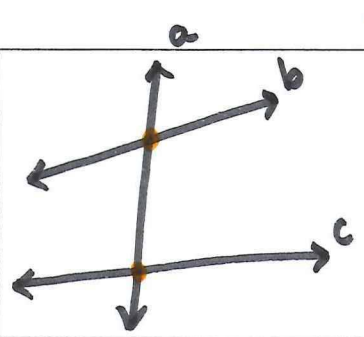
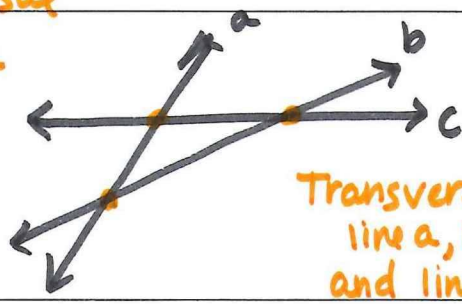
Section 3.1

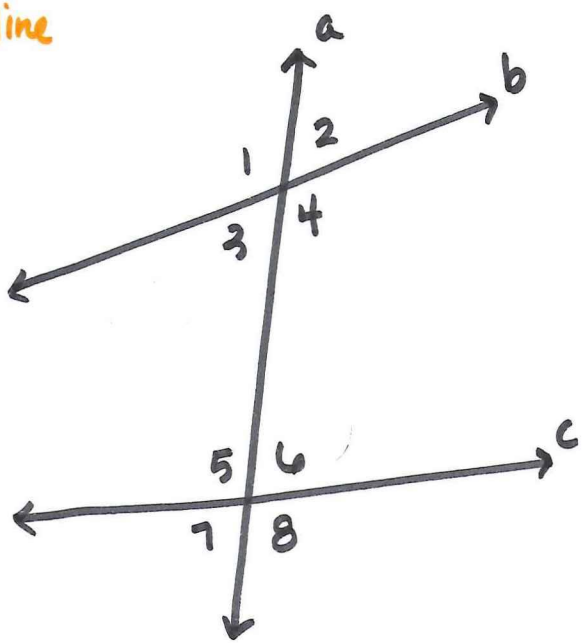
Date_____

Identify Pairs of Lines and Angles

Vocabulary	Definition	Picture	
PARALLEL LINES //	Two lines are parallel lines if they do not intersect and are coplanar.	 line a // line b a // b	 $\overleftrightarrow{AD} \parallel \overleftrightarrow{EH}, \overleftrightarrow{BC}, \overleftrightarrow{FG}$
SKEW LINES	Two lines are skew lines if they do not intersect and are not coplanar.		what lines are skew to $\overleftrightarrow{AD}$? $\overleftrightarrow{BF}, \overleftrightarrow{CG}, \overleftrightarrow{EF}, \overleftrightarrow{GH}$ * $\overleftrightarrow{AD}$ is coplanar w/ all the orange lines
PARALLEL PLANES	Two planes that do not intersect are parallel planes.		Plane ADB // Plane EFG

LOCATION of the ANGLES

TRANSVERSAL	A transversal is a line that intersects two or more coplanar lines at different points.	 Transversal line a  Transversal line a, line b, and line c
CORRESPONDING ANGLES CA	* one interior angle and one exterior angle Two angles are corresponding angles if they have corresponding positions. ↓ same position	∠1 and ∠5 (left above; left above; transversal intersected line) ∠2 and ∠6, ∠3 and ∠7 ∠4 and ∠8
ALTERNATE INTERIOR ANGLES AI	Two angles are alternate interior angles if they lie **between** the two lines and on **opposite sides** of the transversal. ↳ left/right above/below	∠3 and ∠6 (left; right) ∠4 and ∠5 (right; left)
ALTERNATE EXTERIOR ANGLES AE	Two angles are alternate exterior angles if they lie **outside** the two lines and on **opposite sides** of the transversal. ↳ left/right above/below	∠1 and ∠8 (left; right) ∠2 and ∠7 (right; left)
CONSECUTIVE INTERIOR ANGLES CI	Two angles are consecutive interior angles if they lie **between** the two lines and on the **same side** of the transversal. ↳ left/left... above/above...	∠3 and ∠5 (left; left) ∠4 and ∠6 (right; right)



Interior Angles	Exterior Angles
∠3	∠1
∠4	∠2
∠5	∠7
∠6	∠8

same-side interior angles SSI