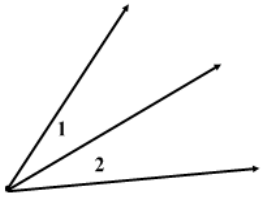
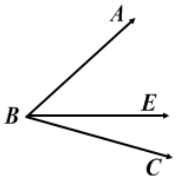
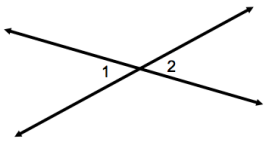
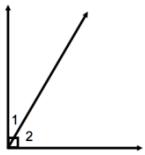
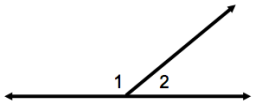
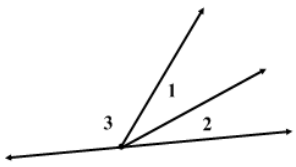
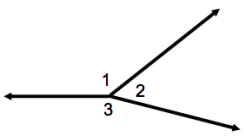
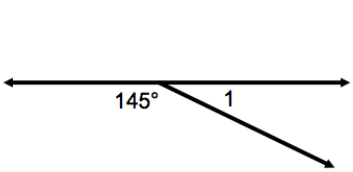
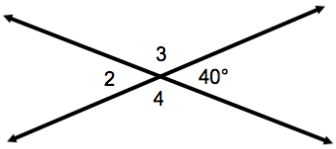
Geometry CC 1.8 - Angles

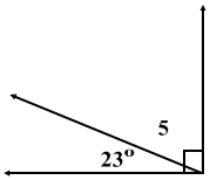
Name	Diagram	Fact/Discovery
Adjacent Angles		Two angles sharing a common vertex and a common side
Complementary Angles	$m\angle A + m\angle B = 90°$	Two angles whose sum is 90 degrees. Complements
Supplementary Angles	$m\angle A + m\angle B = 180°$	Two angles whose sum is 180 degrees. Supplements
Angle Addition		$m\angle ABE + m\angle EBC = m\angle ABC$
Vertical Angles		Opposite angles formed by intersecting lines. Vertical angles are congruent.
Angles forming a right angle sum 90 degrees.		If the exterior sides of two adjacent angles are perpendicular, they from a right angle and are complementary.
Linear Pair		Two angles forming a straight angle are a linear pair.
Consecutive adjacent angles on a line sum 180 degrees.		$m\angle 3 + m\angle 1 + m\angle 2 = 180°$
Consecutive adjacent angles at a point sum 360 degrees.		$m\angle 1 + m\angle 2 + m\angle 3 = 360°$

Part 1

Using the diagrams below, complete the table by finding the measure of each labeled angle and state a reason to justify your answer.



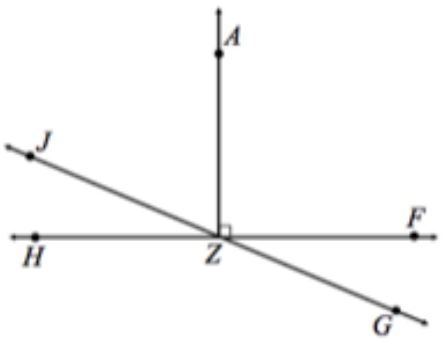




Angle	Angle Measure	Reason
Đ1		
Đ2		
Đ3		
Đ4		
Đ5		

Part 2

Use the following diagram pictured to the right to answer the following:



a. Name an angle supplementary to Đ*HZJ* and provide the reason.

b. Name an angle complementary to Đ*HZJ* and provide the reason.

c. Name an angle congruent to Đ*HZJ* and provide the reason.

d. State a pair of angles forming a linear pair.

e. If $m\angle HZJ = 38°$, what is the measure of each of the following angle? Provide reasons for your calculation.

1. $\angle FZG$

2. $\angle HZG$

3. $\angle AZJ$