Geometry

November Extended Constructed Response (ECR)   Name:

Part A:

$$\overleftrightarrow{AC} \parallel \overleftrightarrow{MN}$$
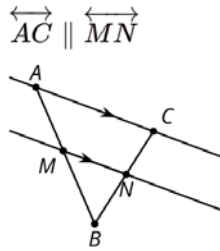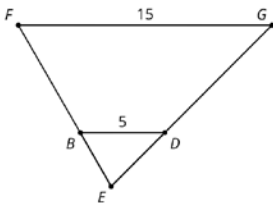

   Patty says that " a line parallel to one side of a triangle always create similar triangles". Use the diagram above to explain if Patty's conjecture is true or false.

Part B:
Segments BD and FG are parallel. Segment EG is 12 units long.

$$\overline{BD} \parallel \overline{FG}$$

Find the measure of segment DG. Show your work

Geometry

Score Rubric

Part A	
Score	Description

3	Student response includes the following 3 elements.
	Reasoning component = 3points
	* State that conjecture is true
	* Use the angle relationships of parallel lines to support the reasoning (students should indicate what types of relationship for the pairs of angles that they used for their reasoning)
	* Use triangle similarity postulates to support the conjecture.
	Sample of student explanation:
	Patty's conjecture is correct.
	Because
	$\overleftrightarrow{AC} \parallel \overleftrightarrow{MN}$
	So angle BNM $\cong$ angle BCA (corresponding angles)
	   Angle BMN $\cong$ angle BAC (corresponding angles)
	   Triangle BNM $\cong$ Triangle BCA (AA)

2	Student response includes 2 of 3 element
1	Student response includes 1 of 3 element
0	Student response is incorrect or irrelevant
Part B	
Score	Description
2	Student response includes the following 2 element. • Correct computation to find the answer • Logical progression (showing work) toward problem solving, Sample of student work $\dfrac{5}{15} = \dfrac{ED}{12}$ ED = 4 EG $-$ ED = DG 12-4 = 8 DG= 8
1	Student response includes 1 of 2 element
0	Student response is incorrect or irrelevant

Genesis Convert Table

Task Point	Genesis Score
0	55
1	59
2	69
3	79
4	89
5	100