Geometry Module 10 DBA

Part 1 - Application

Create a word problem that can be represented by this mathematical statement and solve your problem. Be sure to show and explain all work.

$$\frac{12!}{3!\,9!}$$

Part 2 - Find the error(s) and solve the problem correctly.

Find ${}_{6}P_{4}$

$$\frac{6!}{4!} = \frac{6 \cdot 5 \cdot 4!}{4!} = 30$$

Part 3 - Discussion Question

In your own words compare and contrast Permutations and Combinations. When do you use each? Give an example of each.

Part 4 - Reflection

Your response must be at least three paragraphs (1 paragraph per question).

This question required:

1. Think back over this entire semester. What concept/module do you still need clarification on? Have you reached out to your teacher about this concept/module? What are 3 ways that you can be successful on your final exam? What assignments do you need to review and study before you take the final exam?

Choose 2 of the following questions:

2. Briefly explain a concept in this module and give at least one real world example that demonstrates the concept that you have selected. Share an original example that you have written and solved. Be sure it is not given in the course content or in the application question above.
3. Does your work in this semester truly reflect your effort? If so, how? If not, how could you improve your effort in your next math course? What would you do differently?
4. Describe a specific LSS resource in addition to the course content that you used in this course throughout the year and how it helped you learn the concepts?
5. Describe the notebook that you used in this course. Did you stay organized the entire year? What changes would you make as you prepare for your next math course? What advice would you give students that are starting their first day of Geometry?

Rubric

	Not applicable	Needs Improvement	Proficient	Exemplary
	(0 points)	**(up to 5.5 points)**	**(up to 8.5 points)**	**(up to 10 points)**
Part 1 Application	Solution is incorrect and the student did not show or explain work or work the problem incorrectly.	Solution is incorrect; however the student showed their work and made an error(s)in calculations. OR Solution is correct but there is no work shown or explained	Solution is correct, however there is little work shown for the problem.	Solution is correct. All work shown and explained using mathematical language from this module.
Part 2 Find the Error	Errors not found or explained. Error in attempt to rework the problem.	Some or no errors found. Problem reworked out partially.	All or most errors found and explained. Problem not reworked correctly.	All errors found and explained. Problem worked out correctly with all work shown
Part 3 Discussion Question	Discussion question not answered or discussed without correct conclusion	Errors in discussion. Little to no mathematical language included in the discussion	Discussion has few errors. Little to no mathematical language included in the discussion	Discussion is correct using mathematical language included in this module to answer the discussion question.
Part 4 Reflection	Reflection not answered.	Reflection attempted but response is less than 3 paragraphs. No specific examples given.	3 paragraphs are written but less than 2 sentences and/or meaningful discussion is missing for a paragraph. Little to no specific examples given.	3 paragraphs of at least 3 meaningful sentences each answering each question reflecting on this module. Specific examples are given to justify the reflection questions.