Example. Case Study Item

*A 58-year-old male presented to the Emergency Department (ED) with complaints of chest pressure, indigestion, and dizziness. He stated that the chest pressure started while he was mowing the lawn and “got a little better” after he sat down. He has a history of hypertension, Type II diabetes, and hyperlipidemia and takes the following medications:*

* *Glipizide XR 5 mg PO daily 30 minutes before breakfast*
* *Amlodipine 5mg daily by mouth*
* *Atorvastatin 20 mg daily by mouth*

*Upon arrival to the ED, vital signs were: Blood Pressure 169/88, Heart rate 111, Respiratory rate 18, Temperature 36.9, and oxygen saturation 93% on room air. He rates his chest pain as 4/10 and describes the pain as throbbing mid-sternal non-radiating pain. He is diaphoretic with pale and cool skin.*

*Cloze Item:*

*After applying 2 Liters oxygen via nasal cannula, the priority intervention is to:*

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* *Administer Morphine Sulfate 4mg IV STAT*
* *Administer Nitroglycerin 0.4mg sublingual STAT*
* *Administer Aspirin 81mg PO STAT*

*followed by*

* *Insert an 18 gauge peripheral IV*
* *Administer albuterol sulfate 2.5mg via nebulizer*
* *Obtain 12-lead EKG STAT*

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**Rationale**: The correct choice is “Administer nitroglycerin 0.5mg sublingual STAT.” As a vasodilator and an afterload reduction agent, this medication will help to decrease cardiac output demands. Although administering morphine and aspirin should be considered, they are not the priority. The correct choice for the second part of the item is “Obtain a 12-lead EKG STAT.” The priority is to determine if the client is having an ST-segment elevation myocardial infarction. This will determine next steps in the treatment plan. In this example, if using the +/- scoring rule, the student would get credit for the correct choices and lose credit for the incorrect ones. A possible score of 0-4 for this question exists depending on the responses chosen.