Question 6: Short Answer   **4 points**

(a)	For the correct answer:	**1 point**

525 nm

(b)(i)	For the correct answer:	**1 point**

92.0 mL

(ii)	For the correct calculated value:	**1 point**

$$V_1 = \frac{M_2 V_2}{M_1} = \frac{\left(1.68 \times 10^{-3}\ M\right)(100.0\ \text{mL})}{\left(2.40 \times 10^{-3}\ M\right)} = 70.0\ \text{mL}$$

Total for part (b)	**2 points**

(c)	For the correct answer and a valid justification:	**1 point**

The student could have improperly executed step 3. If the cuvette was not rinsed with the standard solution prior to being filled for the measurement of absorbance, the standard solution would be diluted by the remaining distilled water, and the absorbance would be lower than what it should be.

Total for question 6	**4 points**