

POLYPHARMACY

**Polypharmacy Project**

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**N322 Introduction to Pharmacology**

**Lakeview College of Nursing**

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**Polypharmacy Case #11**

## POLYPHARMACY

Patient: Victoria is an 84-year-old female that lives on her own in her small apartment. Her daughter does visit her one time a week – however, she lives 35 miles away and cannot visit more frequently due to her home, family and work commitments. Victoria does have a home health care worker that visits once a day in the morning, 3 days/week, to assist with bathing, dressing, cooking breakfast, and taking her morning pills. Her daughter found out today that Victoria called and ambulance and went to the ED for back pain and weakness this past week. She was diagnosed with a urinary tract infection but says she feels much better after the medications and fluids they gave at the emergency room.

Social History: Victoria has a history of smoking cigarettes (1/2 pack per day for 40 years). She quit smoking cigarettes 5 years ago at the urging of her daughter but does occasionally use a nicotine vape pen. No history of alcohol or illicit drug use.

Economics: Victoria is retired from a state job and draws a pension of \$876/month and Social Security benefits of \$978/month. This is her only income.

Insurance: Victoria has Medicare Part A, B and D.

Medical hx: hypertension, rheumatoid arthritis, and high cholesterol, anxiety, insomnia

Wt 120 pounds Ht 5ft 2in

Allergies: ASA, Latex, Shellfish

Medications:

bendroflumethiazide 2.5 mg daily

Benazepril 10 mg by mouth daily

Simvastatin 40 mg at night

Methotrexate 20 mg once weekly on a Wednesday

Folic acid 5 mg daily except on Wednesday

Acetaminophen 1 g four times daily when needed.

trimethoprim 200 mg twice daily for 7 days for UTI

Ezetemibe 10 mg by mouth once daily

Xanax 1mg BID as needed

Zolpidem 10 mg at bedtime for sleep

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<p>Drug #1</p>	<p>Drug Name (Generic): bendroflumethiazide  Drug Name (Trade): Aprinox  Drug Class: thiazide diuretic</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>2.5 mg, orally, daily.</p>
<p>Specific Directions not included above:</p>	<p>Take with or without food. Keep taking medications as prescribed, even if the patient feels better. This medication can cause the patient to pass urine more often. Therefore, taking this medication around bedtime should be avoided to avoid nocturia.</p>
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>This medication can be taken with benazepril. However, their effects can increase each potency and lower blood pressure more than intended. Doses should be adjusted to ensure they are taken safely.</p> <p>This medication can be taken with methotrexate. However, the patient should inform their provider they are taking both medications. Doses should be adjusted to ensure they are taken safely.</p> <p>This medication can be taken with alprazolam. However, their effects can increase each potency and lower blood pressure more than intended. Doses should be adjusted to ensure they are taken safely.</p> <p>This medication can be taken with zolpidem. However, their effects can increase each potency and lower blood pressure more than</p>

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	intended. Doses should be adjusted to ensure they are taken safely.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )	
Does any of the client's past medical history contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. 2.
How much would medication cost per month if paying out of pocket?	

Drug #2	Drug Name (Generic): benazepril Drug Name (Trade): Lotensin Drug Class: ACE inhibitor
How is the medication taken: (include dose, route, and frequency)	10 mg, orally, daily.
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	This medication can be taken with bendroflumethiazide. However, their effects can increase each potency and lower blood pressure more than intended. Doses should be adjusted to ensure they are taken safely.

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Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )	
Does any of the client's past medical history contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. 2.
How much would medication cost per month if paying out of pocket?	
Drug #3	Drug Name (Generic): Simvastatin Drug Name (Trade): Zocor Drug Class: HMG-CoA reductase inhibitor
How is the medication taken: (include dose, route, and frequency)	40 mg, orally, daily.
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	
Lifestyle interactions: (Daily tobacco use, alcohol, drugs,	

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etc. )	
Does any of the client's past medical history contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. 2.
How much would medication cost per month if paying out of pocket?	
Drug #4	Drug Name (Generic): methotrexate Drug Name (Trade): Trexall Drug Class: Antimetabolites
How is the medication taken: (include dose, route, and frequency)	20 mg, orally, weekly.
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	This medication can be taken with bendroflumethiazide. However, the patient should inform their provider they are taking both medications. Doses should be adjusted to ensure they are taken safely.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )	

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Does any of the client's past medical history contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> <li>1.</li> <li>2.</li> </ol>
How much would medication cost per month if paying out of pocket?	
Drug # 5	<p>Drug Name (Generic): folic acid</p> <p>Drug Name (Trade): Folvite</p> <p>Drug Class: B complex vitamin</p>
How is the medication taken: (include dose, route, and frequency)	5mg, orally, daily except one day a week
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )	
Does any of the client's past medical history contradict the use of this medication?	

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<p>What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)</p>	
<p>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<p>1. 2.</p>
<p>How much would medication cost per month if paying out of pocket?</p>	
<p>Drug # 6</p>	<p>Drug Name (Generic): acetaminophen Drug Name (Trade): Tylenol Drug Class: analgesic</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	
<p>Specific Directions not included above:</p>	
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )</p>	
<p>Does any of the client's past medical history contradict the use of this medication?</p>	

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<p>What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)</p>	
<p>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<p>1. 2.</p>
<p>How much would medication cost per month if paying out of pocket?</p>	
<p>Drug # 7</p>	<p>Drug Name (Generic): trimethoprim Drug Name (Trade): Primsol Drug Class: urinary anti-infectives</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	
<p>Specific Directions not included above:</p>	
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )</p>	
<p>Does any of the client's past medical history contradict the use of this medication?</p>	
<p>What is the indication for use of this medication based on the client's past medical history? (If</p>	

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<p>unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)</p>	
<p>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<p>1. 2.</p>
<p>How much would medication cost per month if paying out of pocket?</p>	
<p>Drug # 8</p>	<p>Drug Name (Generic): ezetemibe Drug Name (Trade): Zetia Drug Class: cholesterol absorption inhibitor</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	
<p>Specific Directions not included above:</p>	
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )</p>	
<p>Does any of the client's past medical history contradict the use of this medication?</p>	
<p>What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for</p>	

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use of the medication in general)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. 2.
How much would medication cost per month if paying out of pocket?	
Drug # 9	Drug Name (Generic): alprazolam Drug Name (Trade): Xanax Drug Class: benzodiazepine
How is the medication taken: (include dose, route, and frequency)	
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	This medication can be taken with bendroflumethiazide. However, their effects can increase each potency and lower blood pressure more than intended. Doses should be adjusted to ensure they are taken safely.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )	
Does any of the client's past medical history contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	

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<p>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<p>1. 2.</p>
<p>How much would medication cost per month if paying out of pocket?</p>	
<p>Drug # 10</p>	<p>Drug Name (Generic): zolpidem Drug Name (Trade): Ambien Drug Class: sedative-hypnotic</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	
<p>Specific Directions not included above:</p>	
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>This medication can be taken with bendroflumethiazide. However, their effects can increase each potency and lower blood pressure more than intended. Doses should be adjusted to ensure they are taken safely.</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )</p>	
<p>Does any of the client's past medical history contradict the use of this medication?</p>	
<p>What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)</p>	

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What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. 2.
How much would medication cost per month if paying out of pocket?	

Is there anything about this medication regimen scenario that might indicate a potential difficulty in maintaining compliance with the orders as listed?

Is there anything about this medication regimen scenario that might assist the client in maintaining the medication regimen as ordered?

What suggestions might you make to the prescriber and/or client (or questions you might ask the prescriber) to help this client scenario? (think about decreasing the potential for interaction(s) through medication reduction, other potential medications, diet changes, lifestyle changes, etc)

What would the patients monthly out of pocket expense for all 10 medications? (Total Cost for all 10 meds)?

Reflective Statement of Experience:

References

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N322 Polypharmacy Grading Rubric

Criteria	Excellent 40 points	Acceptable 31-39 points	Unacceptab le 0-30 points	Points Earned
<p>Each drug should have a completed breakdown within the tables provided, which includes the following:</p> <ul style="list-style-type: none"> <li>· Drug class</li> <li>· Generic name</li> <li>· Trade name</li> <li>· How is the medication taken (include dose, route, frequency)</li> </ul>	All key components were addressed within the paper and were accurate.	The student provided the required information for some of the medications, but not all and/or the answers provided were inaccurate. (Each individual component for each medication is worth one point)	The student failed to address a sufficient number of the listed components within the paper and/or the components were addressed but were inaccurate. (Each individual component for each medication is worth one point)	___/40
Criteria	Excellent 10 points	Acceptable 8-10 points	Unacceptab le	Points Earned

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			0 - 7 points	
<p>Specific Directions not included above:</p> <ul style="list-style-type: none"> <li>Is there any type of medication on the patient list that have specific directions?</li> </ul> <p>(before bed, before breakfast, 30 minutes before meals, etc..)</p>	All key components were addressed within the paper.	The student did list some of the medications that required specific directions, however some of the medications included specific directions that were not addressed and/or were inaccurate. (For each medication this question if worth one point)	Student failed to answer the questions and/or the answers were inaccurate. (For each medication this question is worth one point)	___/10
<b>Criteria</b>	<b>Excellent 0 points</b>	<b>Acceptable 16-19</b>	<b>Unacceptab le 0-15 points</b>	<b>Points Earned</b>
<p>Does this medication have any potentially serious interactions with any other medication(s) on this list, and/or potential interactions that should be closely monitored due to co-administration?</p> <ul style="list-style-type: none"> <li>Do any of</li> </ul>	All medications reviewed and student explained medication interactions.	The student did list some of the potential interactions of the medication(s), but failed to address all potential interactions that are serious and/or need close monitoring. (for each medication listed this question is worth two	Student failed to answer question and/or The student did list some of the potential interactions of the medication(s), but failed to	___/20

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<p>the medications interact with each other?</p> <p>(Please note: if there is an interaction between two medication, you MUST list that interaction on BOTH medications to receive full credit. You may utilize the same verbiage/wording on each medication, we want to know you are thinking about it when considering each medication)</p>		<p>points)</p>	<p>address all potential interactions that are serious and/or need close monitoring. (for each medication listed this question is worth two points)</p>	
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Criteria	Excellent 5 points	Acceptable 4 points	Unacceptable 0 -3 points	Points Earned
<p>Lifestyle interactions: · What</p>	<p>Student showed knowledge why lifestyle would</p>	<p>The student listed lifestyle interactions for</p>	<p>Student failed to answer question or the student listed</p>	<p>___/5</p>

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<p>lifestyle factors counteract with the medications?</p> <p>(tobacco user, ETOH use – 3 beers daily)</p>	<p>counteract with medications</p>	<p>some of the medications, but not all and/or the interactions listed were not priority or were incorrect. (For each medication, this question is worth half a point)</p>	<p>lifestyle interactions for some of the medications, but not all and/or the interactions listed were not priority or were incorrect. (For each medication, this question is worth half a point)</p>	
<p><b>Criteria</b></p>	<p><b>Excellent 10 points</b></p>	<p><b>Average 8-9</b></p>	<p><b>Unacceptable 0-7 points</b></p>	<p><b>Points Earned</b></p>
<p>Does any of the client's past medical history contradict the use of this medication?</p>	<p>Student showed knowledge why the client's past medical history would contradict the use of the medication(s).</p>	<p>Student provided answers to the question(s), but failed to answer all the questions and/or the answers provided were inaccurate. (For each medication this question is worth one point)</p>	<p>Student failed to answer question or Student provided answers to the question(s), but failed to answer all the questions and/or the answers provided were inaccurate. (For each medication this question is worth one point)</p>	<p>___/10</p>

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Criteria	Excellent 10 points	Acceptable 8-9 points	Unacceptable 0-7 points	Points Earned
<p>What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)</p>	Student showed knowledge of medications and what conditions corresponds with medications	The student provided appropriate indications for some of the medications, but failed to capture all of the appropriate indications for use. (For each medication this question is worth one point)	Student failed to answer the question or The student provided appropriate indications for some of the medications, but failed to capture all of the appropriate indications for use. (For each medication this question is worth one point)	___/10
Criteria	Excellent 20 points	Acceptable 16-19 points	Unacceptable 0-15 points	Points Earned
<p>What would you teach the client about taking this medication?</p> <p>What education is needed for the medication? (For each medication listed the student must prioritize two topics for client education) (You must</p>	Student showed the importance of medication education, and appropriate prioritized client education for the scenario provided.	The student provided some appropriate education for the client, but failed to capture all of the appropriately prioritized education for the client. (Each topic of education is worth one point)	Student failed to answer the question OR The student provided some appropriate education for the client, but failed to capture all of the appropriately prioritized education for the client. (Each topic of education is worth one point)	___/20

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<p>consider all component(s) of the medication list when answering this question... if there are potential interactions with other medication this may be a priority over general education for this one medication)</p>				
Criteria	Excellent 10 points	Acceptable 8-9 points	Unacceptable 0-7 points	Points Earned
<p>Is there anything about this medication regimen/ scenario that might indicate a potential difficulty in maintaining compliance with the orders as listed? · Why would the patient have difficulty maintaining the medication regiment? (Please consider</p>	<p>Student had knowledge on why a patient would have difficulty with medication regiment</p>	<p>The student indicated some potential reasons that the client may have difficulty, however the student failed to indicate a reason OR an appropriate reason for some of the medications (This question is worth one point for each medication)</p>	<p>Student failed to answer the question OR the student indicated some potential reasons that the client may have difficulty, however the student failed to indicate a reason OR an appropriate reason for some of the medications (This question is worth one point for each medication)</p>	<p>___/10</p>

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<p>all factors in the scenario and all information provided within your chart – including cost, insurance, frequency of administration, etc)</p>				
<p><b>Criteria</b></p>	<p><b>Excellent 10 points</b></p>	<p><b>Acceptable 8-9 points</b></p>	<p><b>Unacceptable 0-7 points</b></p>	<p><b>Points Earned</b></p>
<p>Is there anything about this medication regimen/ scenario that might assist the client in maintaining the medication regimen as ordered? · What factors are present to remain compliant?  (Please consider all factors in the scenario and all information provided within your chart – including cost,</p>	<p>Student had knowledge on medication compliance</p>	<p>The student answered the question appropriately for some of the medications but failed to indicate all of the factors that assist with compliance. (This question is worth one point for each medication)</p>	<p>Student failed to answer the question OR The student answered the question appropriately for some of the medications but failed to indicate all of the factors that assist with compliance. (This question is worth one point for each medication)</p>	<p>___/10</p>

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insurance, frequency of administration, etc.				
<b>Criteria</b>	<b>Excellent</b> 15 points	<b>Acceptable</b> 8-9 points	<b>Unacceptable</b> 0 points	<b>Points Earned</b>
<ul style="list-style-type: none"> <li>How much would this medication cost per month if the patient were to pay for them out of pocket? (best assessment based off of research)</li> <li>What would the client's monthly out of pocket expense for all 10 medications?</li> </ul>	Student showed research on medication costs	The student provided accurate research for some of the medications, but failed to provided research for all medications (This question is worth one point for each medication, with the total cost being worth 5 points)	Student failed to answer the question OR The student provided accurate research for some of the medications, but failed to provided research for all medications (This question is worth one point for each medication, with the total cost being worth 5 points)	___/15
<b>Criteria</b>	<b>Excellent</b> 20 points	<b>Acceptable</b> 16-19 points	<b>Unacceptable</b> 0-15 points	<b>Points Earned</b>
<p>The student must appropriately format the paper and include all of the following:</p> <ul style="list-style-type: none"> <li>Entire document must include appropriate citations,</li> </ul>	The document included a title page, the rubric, the client scenario, a reference page which included five references that were cited within the document. APA formatting	The document did not meet all of the criteria for formatting/ referencing. See "criteria" to the left for further breakdown.	The document did not meet all of the criteria for formatting/ referencing. See "criteria" to the left for further breakdown.	___/20

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<p>reference page, title page, page numbers, running head, all with appropriate formatting per APA (10 points – each missing or inaccurate portion per APA is worth one point)</p> <ul style="list-style-type: none"> <li>· The student provided a rubric attached for grading (3 points)</li> <li>· The student included the provided client scenario on page two of the document (2 points)</li> <li>· The paper included a minimum of five references which were cited within the document (each reference with one citation is worth 5 points)</li> </ul>	<p>was consistent with the APA manual.</p>			
<p>Criteria</p>	<p>Excellent 20 points</p>	<p>Acceptable 16-19 points</p>	<p>Unacceptable 0-15 points</p>	<p>Points Earned</p>

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<p>What suggestions might you make to the prescriber and/or client (or questions you might ask the prescriber) to help this client scenario? (think about decreasing the potential for interaction(s) through medication reduction, other potential medications, diet changes, lifestyle changes, etc)</p> <p>Elaborate on this, explaining why you feel it should be addressed, why it is priority and provide evidence behind your presentation.</p>	<p>The student was able to identify one potential idea or question to present to the prescriber or client. This question showed evidence of good critical thinking.</p>	<p>The student was able to identify one potential idea or question to present to the prescriber or client, however there was a much higher priority question/suggestion/issue within the scenario that should have been addressed.</p>	<p>The student failed to answer the question OR the student answered the question, however the students answer was dangerously inaccurate.</p>	<p>___/20</p>
<p><b>Criteria</b></p>	<p><b>Excellent 10 points</b></p>	<p><b>Acceptable 8-9 points</b></p>	<p><b>Unacceptable 0-7 points</b></p>	<p><b>Points Earned</b></p>
<p>Reflective</p>	<p>The students</p>	<p>The student</p>	<p>Student failed to</p>	<p>___/10</p>

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<p>statement of experience should include the following:</p> <ul style="list-style-type: none"> <li>-insight into the project itself (a specific example within the project and its implications)</li> <li>-A basic understanding of polypharmacy</li> <li>-A reflection on this student nurses role in this scenario as a client advocate/educator/caregiver</li> </ul>	<p>provided reflection showed good insight into the project itself, polypharmacy, and the nurses role in client advocacy</p>	<p>provided a reflection, however the reflection lacked one of the following</p> <ul style="list-style-type: none"> <li>-insight into the project itself (a specific example within the project and its implications).</li> <li>-A basic understanding of polypharmacy</li> <li>-A reflection on this student nurses role in this scenario as a client advocate/educator/caregiver</li> </ul>	<p>reflect on their project OR the student addressed only of the topics of reflection</p>	
<p>Total Points</p>				<p>____/200</p>