

**Assessment Schedule – 2015**

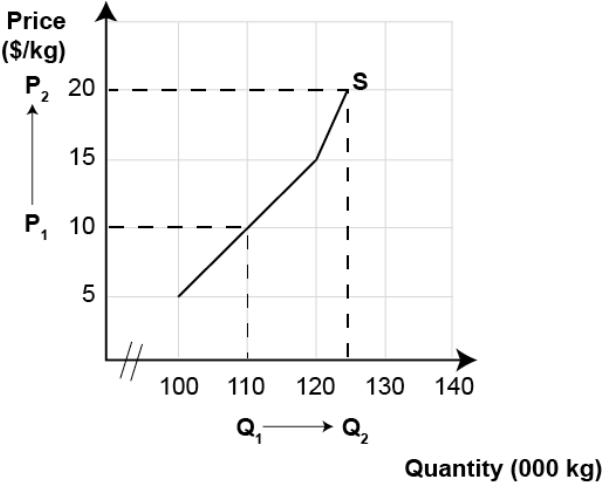
**Economics: Demonstrate understanding of producer choices using supply (90985)**

**Assessment Criteria**

<b>Achievement</b>	<b>Achievement with Merit</b>	<b>Achievement with Excellence</b>
<p><i>Demonstrate understanding</i> involves:</p> <ul style="list-style-type: none"> <li>• defining, identifying, describing, or providing an explanation of choices a producer makes in response to a change in internal or external factors affecting supply</li> <li>• identifying, describing, or providing an explanation of the flow-on effects for the producer</li> <li>• clearly illustrating changes using the supply model.</li> </ul>	<p><i>Demonstrate in-depth understanding</i> involves:</p> <ul style="list-style-type: none"> <li>• providing a detailed explanation, using supply, of choices a producer makes in response to a change in internal or external factors affecting supply</li> <li>• providing a detailed explanation of the flow-on effects for the producer.</li> </ul>	<p><i>Demonstrate comprehensive understanding</i> involves:</p> <ul style="list-style-type: none"> <li>• linking detailed explanations of the flow-on effects for the producer with detailed explanations of choices a producer makes in response to a change in internal or external factors affecting supply</li> <li>• integrating changes in supply into detailed explanations.</li> </ul>

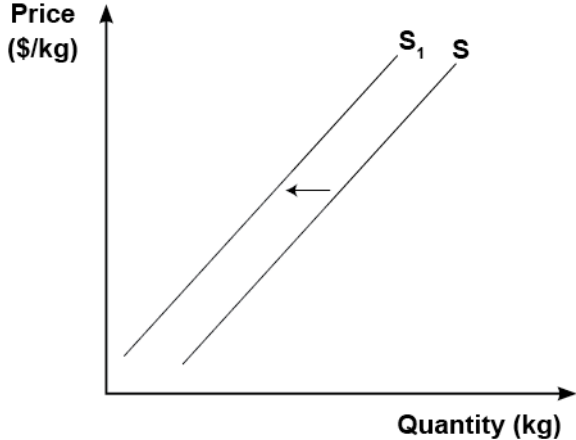
Each question should be read as a whole before awarding a grade.

Evidence

QUESTION ONE	Sample answers/Evidence	Achievement	Achievement with Merit	Achievement with Excellence
<p>(a) and (b)</p>	<p style="text-align: center;"><b>Cade's monthly supply of cherries</b></p> 	<p>Demonstrates understanding by:</p> <ul style="list-style-type: none"> <li>• drawing the graph with FIVE correct requirements (from: title, price (\$/kg), quantity (000kg), points/line correct, <b>S</b> label, scale correct)</li> <li>• identifying accurate movement up the supply curve</li> <li>• describing the law of supply</li> <li>• explaining a reason for the law of supply</li> <li>• suggesting an appropriate related good and explaining why it is a related good for cherries</li> <li>• stating decrease in supply of the related good.</li> </ul>	<p>Detailed explanation, which includes fully explaining:</p> <ul style="list-style-type: none"> <li>• the law of supply, with the idea of increased profitability and some use of data</li> <li>• the decreased supply of a related good with reference to relative profitability.</li> </ul> <p>Candidate uses detailed explanations, mostly in context.</p>	<p>Comprehensive explanation, which includes fully explaining:</p> <ul style="list-style-type: none"> <li>• the law of supply, referring to higher profitability with revenue and cost</li> <li>• the decreased supply of a related good with cost or profit and switching resources.</li> </ul> <p>Candidate uses integrated explanations in context and uses correct data and economic terminology.</p>
<p>(c)</p>	<p>The law of supply says that as the price per kg of cherries increases from \$10 (<math>P_1</math>) to \$20 (<math>P_2</math>), the quantity of cherries Cade supplies will increase from 110 000 kg per month (<math>Q_1</math>) to 125 000 kg per month (<math>Q_2</math>), assuming <i>ceteris paribus</i> (all factors other than price remain constant).</p> <p>As the price per kg of cherries increases, Cade is better able to cover the costs of producing cherries, such as wages. This means that it becomes more profitable for Cade because the difference between revenue and costs is higher. Because it is more profitable at the higher price of \$20, Cade will increase the quantity of cherries he supplies.</p>			

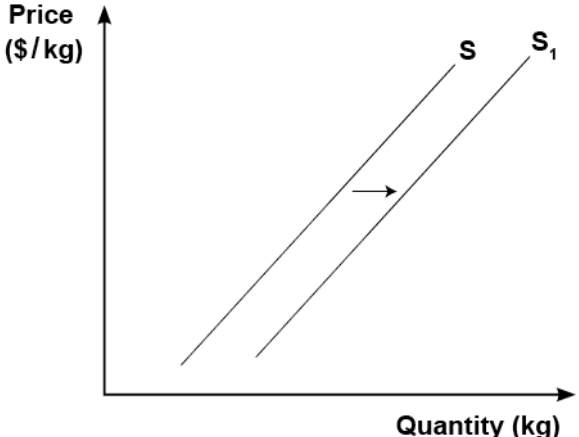
<p>A related good is a good that can be produced with similar resources. For Cade, a related good might be growing apricots. This is a related good because it requires land, a similar climate, and people to pick and grade the fruit, and would face similar laws and regulations.</p> <p>The increase in price per kg of cherries will cause Cade to decrease his supply of apricots and swap more of his land and resources he is currently using for growing apricots towards cherry production. This is because growing apricots is now relatively less profitable for Cade than growing cherries.</p>							
<b>N1</b>	<b>N2</b>	<b>A3</b>	<b>A4</b>	<b>M5</b>	<b>M6</b>	<b>E7</b>	<b>E8</b>
Very little Achievement evidence.	Some Achievement evidence, partial explanations.	Most Achievement evidence.	Nearly all Achievement evidence. At least one explanation.	Some Merit evidence.	Most Merit evidence.	Excellence evidence. One part may be weaker.	All points covered.

**N0** = No response; no relevant evidence.

QUESTION TWO	Sample answers / Evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)	<p><b>Cade's annual supply of cherries</b></p> 	<p>Demonstrates understanding by:</p> <ul style="list-style-type: none"> <li>• shifting the supply curve to the left</li> <li>• stating that there is a decrease in the supply of cherries</li> <li>• explaining a link between the frost/frost prevention and decreased supply</li> <li>• explaining flow-on effect(s).</li> </ul>	<p>Detailed explanation, which includes:</p> <ul style="list-style-type: none"> <li>• showing the shift correctly with appropriate labelling</li> <li>• linking the frost to a decrease in profitability and supply with an example of how fruit quality/quantity would decrease, or costs of production would increase</li> <li>• fully explaining flow-on effect(s) linked to the decrease in supply.</li> </ul> <p>Candidate uses detailed explanations, and makes some reference to the graph.</p>	<p>Comprehensive explanation, which includes:</p> <ul style="list-style-type: none"> <li>• clearly linking the frost and frost prevention to a decrease in profitability by referring to revenue or costs and supply, using an example</li> <li>• fully explaining flow-on effect(s) clearly linked to the decrease in supply.</li> </ul> <p>Candidate refers to the changes on the graph and uses correct economic terminology.</p>
(b)	<p><b>Explaining the effect of frost</b></p> <p>The frost will decrease the number of cherries that Cade is able to supply. This is because the frost would damage the developing fruit and the cherries might not grow/ripen properly/might damage the appearance of the fruit, which would make it unsuitable to be sold as quality fruit. Trying to prevent the frost damaging the fruit would increase Cade's costs of production, as it would require him to use extra time, effort, fuel costs, or machinery hire to prevent frost settling on the developing fruit (e.g. fans etc). Growing cherries would then be less profitable, as Cade would have fewer cherries developing and available to sell and would also have increased costs from trying to prevent the frost affecting the fruit. Cade's supply of cherries would decrease, as shown by the shift of the supply curve to the left from <b>S</b> to <b>S<sub>1</sub></b>, which indicates that Cade supplies fewer cherries at each and every price.</p>			

<p><b>Explanation of flow-on effects</b></p> <ul style="list-style-type: none"> <li>• Because of the decreased supply of cherries, Cade will need to employ fewer workers to pick the ripened fruit.</li> <li>• Cade will need /purchase fewer boxes and packing materials to hold the picked cherries / less shipping costs, etc. because he is now supplying less cherries.</li> <li>• As a result of the decreased supply of cherries, Cade might look into hardier varieties of cherries (or other fruits) that will be less susceptible to frost, so he can avoid similar problems in the future.</li> </ul>							
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QUESTION THREE	Sample answers / Evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)	<p style="text-align: center;"><b>Cade's annual supply of cherries</b></p> 	<p>Demonstrates understanding by:</p> <ul style="list-style-type: none"> <li>• shifting the supply curve right</li> <li>• defining technology</li> <li>• defining productivity</li> <li>• explaining a link between the technology and increased productivity</li> <li>• stating that there is an increase in the supply of cherries</li> <li>• explaining flow-on effect(s).</li> </ul>	<p>Detailed explanation, which includes:</p> <ul style="list-style-type: none"> <li>• showing the shift correctly with appropriate labelling</li> <li>• linking the technology to an increase in productivity and supply with an example</li> <li>• fully explaining flow-on effect(s) linked to the increase in supply.</li> </ul> <p>Candidate uses detailed explanations, and makes some reference to the graph.</p>	<p>Comprehensive explanation, which includes:</p> <ul style="list-style-type: none"> <li>• clearly linking the technology to an increase in profitability by referring to productivity, revenue or costs and supply, using an example</li> <li>• fully explaining flow-on effect(s) clearly linked to the increase in supply.</li> </ul> <p>Candidate refers to changes in the graph and uses correct economic terminology.</p>
(b)	<p><b>Explaining the effect of technology</b></p> <p>Technology is tools, including machinery, modifications, arrangements, and procedures used by humans (or similar idea).</p> <p>Productivity is the rate of production / output per unit of input.</p> <p>The new technology / machinery for grading cherries will increase productivity because it means the production process / sorting the good quality cherries from the poor quality ones, will be faster / more efficient / will mean fewer mistakes / less human error.</p> <p>The increased productivity means the cherries can be processed in a shorter amount of time / by fewer workers, which will decrease costs of production and make growing cherries more profitable (as profit is revenue minus costs). The increased profitability results in Cade being more willing and able to supply cherries at each and every price and is shown by a shift of the supply curve to the right from <b>S</b> to <b>S<sub>1</sub></b>.</p>			

<p><b>Explanation of flow-on effects</b></p> <ul style="list-style-type: none"> <li>• Cade can expand his operations now that he is earning greater profits and he has greater ability to fund an expansion.</li> <li>• The new machinery does the jobs of some workers, so as a result Cade might need less workers / make some workers redundant / lays off some workers, which further decreases his costs of production.</li> <li>• Since the existing workers might not have the skills required, Cade might need to pay for his workers to be trained in the use of the new machinery so they can operate it properly.</li> <li>• Cade might look into exporting his cherries because he has a greater quantity of cherries to sell; and, because his grading is more accurate, he can better guarantee the top-quality fruit foreign markets demand.</li> <li>• Cade can repay the business's debt faster with the greater profits from selling more cherries at a lower unit cost, which would save him interest payments in the future.</li> <li>• With the increased supply of cherries, Cade might need to increase his advertising to find new customers in order to sell all the cherries he is now supplying.</li> <li>• Cade will transfer resources to cherries now that the grading process helps him to maintain consistent fruit quality.</li> </ul>							
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**Cut Scores**

<b>Not Achieved</b>	<b>Achievement</b>	<b>Achievement with Merit</b>	<b>Achievement with Excellence</b>
0 – 6	7 – 12	13 – 18	19 – 24