

**Assessment Schedule – 2020****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 <b>understanding</b> involves:</i></p> <ul style="list-style-type: none"> <li>defining, identifying, describing and /or providing an explanation of choices a producer makes in response to a change in either internal or external factors affecting supply</li> <li>identifying, describing, and /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 <b>in-depth understanding</b> involves:</i></p> <ul style="list-style-type: none"> <li>using the supply model to provide a detailed explanation of choices a producer makes in response to a change in either 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 <b>comprehensive understanding</b> involves:</i></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 either internal or external factors affecting supply</li> <li>integrating changes in supply into detailed explanations.</li> </ul>

'Explanation' involves giving a reason for the answer. 'Detailed explanation' involves giving an explanation with breadth (more than one reason for the answer) and / or depth (e.g. using flow-on effects to link the main cause to the main result).

The answer to each question should be read as a whole before awarding a grade.

**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

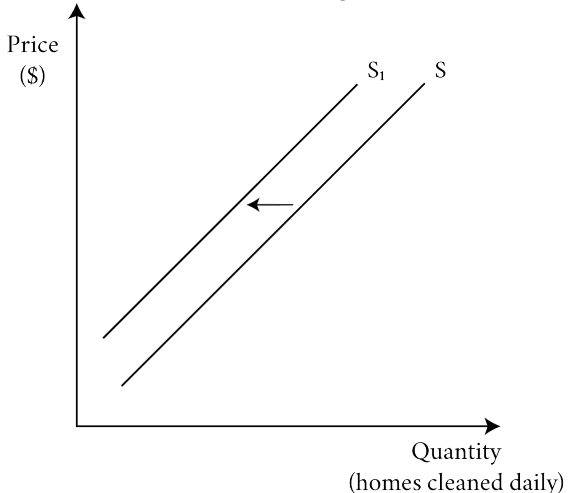
Evidence

Q1	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence																					
(a)	<p style="text-align: center;"><i>Craig's Cleaners' daily supply of indoor home cleaning services</i></p> <table border="1" style="display: none;"> <caption>Data points for Craig's Cleaners' supply curve</caption> <thead> <tr> <th>Quantity (homes cleaned daily)</th> <th>Price (\$)</th> </tr> </thead> <tbody> <tr><td>10</td><td>40</td></tr> <tr><td>12</td><td>50</td></tr> <tr><td>15</td><td>60</td></tr> <tr><td>17</td><td>70</td></tr> <tr><td>20</td><td>80</td></tr> <tr><td>24</td><td>90</td></tr> </tbody> </table>	Quantity (homes cleaned daily)	Price (\$)	10	40	12	50	15	60	17	70	20	80	24	90	<p>Draws the graph with FOUR correct requirements, from:</p> <ul style="list-style-type: none"> <li>- title</li> <li>- points plotted correctly</li> <li>- coordinates joined by a line</li> <li>- S label.</li> </ul>									
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(b)	<p style="text-align: center;"><i>Craig's Cleaners' daily supply of indoor home cleaning services</i></p> <table border="1" style="display: none;"> <caption>Data points for Craig's Cleaners' supply curve with annotations</caption> <thead> <tr> <th>Quantity (homes cleaned daily)</th> <th>Price (\$)</th> <th>Label</th> </tr> </thead> <tbody> <tr><td>10</td><td>40</td><td></td></tr> <tr><td>12</td><td>50</td><td>P, Q</td></tr> <tr><td>15</td><td>60</td><td></td></tr> <tr><td>17</td><td>70</td><td>P1, Q1</td></tr> <tr><td>20</td><td>80</td><td></td></tr> <tr><td>24</td><td>90</td><td></td></tr> </tbody> </table>	Quantity (homes cleaned daily)	Price (\$)	Label	10	40		12	50	P, Q	15	60		17	70	P1, Q1	20	80		24	90		<p>Identifies accurate movement up the supply curve, with at least TWO correct requirements, from:</p> <ul style="list-style-type: none"> <li>- labels</li> <li>- arrow</li> <li>- dotted lines.</li> </ul>		
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(c)	<p>The law of supply states that as the price of cleaning a home increases from \$50 (<b>P</b>) to \$70 (<b>P</b><sub>1</sub>), the quantity of homes that Craig / <i>Craig's Cleaners</i> will be willing and able to clean will increase from 12 (<b>Q</b>) to 17 (<b>Q</b><sub>1</sub>) homes, assuming <i>ceteris paribus</i>.</p> <p><i>Ceteris paribus</i> assumes that all other factors (e.g. cost of production, productivity, cost of related goods etc.) remain the same / unchanged. Therefore, the price change of indoor home cleaning alone determines the change in quantity supplied.</p> <p>As the price to clean a home increases, Craig / <i>Craig's Cleaners</i> is more able to cover the costs of home cleaning (e.g. wages, cleaning products, uniforms, petrol to travel between jobs and safety equipment such as gloves and masks). It is therefore more profitable for <i>Craig's Cleaners</i> as there is a greater difference (i.e. gap) between its revenue and costs of production, given <i>ceteris paribus</i>. Because it is more profitable at the higher price, <i>Craig's Cleaners</i> will increase the quantity of indoor home cleaning services supplied.</p>	<p><b>Identifies</b> an increase in the quantity of indoor home cleaning services supplied.</p>	<p><b>Fully explains</b> the law of supply, with the idea of increased profitability and using data in context.</p> <p><b>Describes</b> <i>ceteris paribus</i>.</p> <p><b>Explains</b> a reason for the law of supply.</p>	<p><b>Fully explains</b> the law of supply, referring to the greater gap between revenue and cost.</p> <p><b>Explains</b> <i>ceteris paribus</i> with an <b>example</b>.</p>
(d)	<p>Example flow-on effects:</p> <ul style="list-style-type: none"> <li>• CC will purchase more chemicals, because these materials are needed for cleaning, and they will need more if they are cleaning more homes.</li> <li>• Because the business is now cleaning more homes, Craig may choose to give the current CC employees longer hours to enable them to do the work, knowing they have the skills to do the work well.</li> <li>• If CC employs more staff, Craig will need to buy or lease more cars, which may mean that the business has to get a new loan to pay for this, which will need to be repaid with interest.</li> <li>• CC will employ more staff to enable the business to clean more homes.</li> <li>• CC may invest in new or upgraded equipment because they can now afford it (given greater profitability).</li> </ul>		<p><b>Explains</b> ONE flow-on effect.</p>	<p><b>Fully explains</b> TWO flow-on effects.</p>

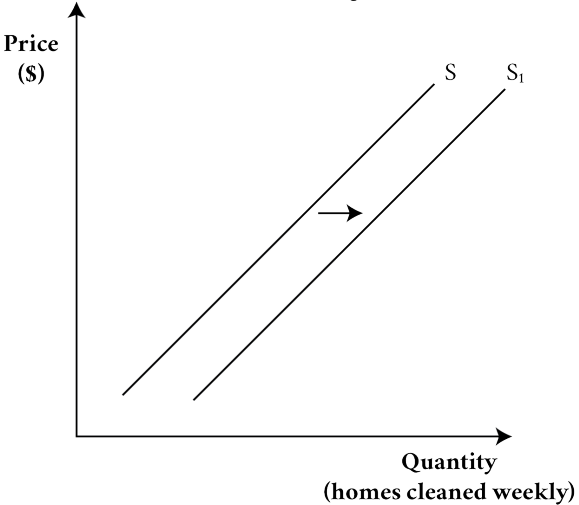
N1	N2	A3	A4	M5	M6	E7	E8
Very little Achievement evidence.	Some Achievement evidence, partial explanations.	Most Achievement evidence.	Nearly all Achievement evidence.	Some Merit evidence.	Most Merit evidence.	Excellence evidence. One part may be weaker.	All points covered.

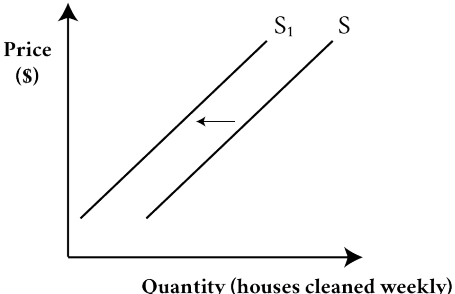
**N0** = No response; no relevant evidence.

Q2	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)	<p><i>Craig's Cleaners'</i> daily supply of indoor home cleaning services</p> 	<p>Shifts the supply curve to the left, with arrow and / or label.</p>	<p>Shows the shift correctly <b>with appropriate labelling.</b></p>	
(b)	<p>When Craig/CC switches to natural cleaning products the business will be paying more, as these products are more expensive than those currently used. Cost of production will therefore increase, and this will decrease profitability since there will be a smaller gap between <i>Craig's Cleaners'</i> revenue and cost of production.</p> <p>Since profitability has decreased, CC will be less willing and able to supply indoor home cleaning at each and every price, and this is shown by a shift of the supply curve to the left, from <b>S</b> to <b>S<sub>1</sub></b>, because supply has decreased.</p>	<p><b>States</b> that there is a decrease in supply of indoor home cleaning.</p> <p><b>Explains</b> a link between the change in cleaning products and decreased supply.</p>	<p><b>Links</b> the change in cleaning products to a decrease in profitability and therefore a decrease in supply.</p>	<p><b>Clearly links</b> the change in cleaning products (to a more expensive product) to the decrease in profitability by <b>referring to</b> revenue and costs and supply.</p>
(c)	<p>Possible flow-on effects of <i>Craig's Cleaners</i> doing less indoor cleaning:</p> <ul style="list-style-type: none"> <li>• CC will not need as many employees; may make some redundant, or reduce their hours.</li> <li>• CC will purchase less petrol or other materials.</li> <li>• CC may sell one of their company cars because it is no longer needed.</li> <li>• CC may change their advertising to highlight their use of safer / more environmentally friendly cleaning products.</li> </ul>	<p><b>Explains</b> ONE flow-on effect.</p>	<p><b>Fully explains</b> ONE flow-on effect.</p> <p>Uses a detailed explanation.</p>	<p><b>Fully explains</b> TWO flow-on effects for CC.</p> <p>Refers to changes on the graph and uses correct economic terminology.</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>
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Q3	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)	<p><i>Craig's Cleaners' weekly supply of indoor home cleaning services</i></p> 	<p>Shifts supply curve to the right, with arrow and / or S<sub>1</sub> label.</p>	<p>Correctly shows shift with <b>appropriate labelling</b>.</p>	
(b)	<p>Productivity is the rate of production, measured as output divided by input e.g. the amount of home area cleaned per hour, or per worker. The new technology (high-speed vacuum cleaners) will increase productivity because homes can be cleaned in less time, which means <i>CC's</i> employees are more efficient. The new technology is more powerful so there is less need to clean over the same space twice, increasing productivity.</p> <p>The increased productivity means homes can be cleaned in less time / fewer cleaners are required to clean homes. This will decrease cost of production and make home cleaning more profitable as profit is revenue minus costs. Because the profitability has improved, this causes an increase in supply – showing that <i>CC</i> is willing to supply more indoor home cleaning at every price. This means the supply curve will shift to the right.</p>	<p><b>Explains</b> a link between the new technology and the increase in productivity.</p> <p><b>Explains</b> a link between productivity and profitability.</p>	<p><b>Links</b> the new technology to increases in productivity <b>and</b> profitability.</p>	<p><b>Clearly links</b> the new technology to an increase in profitability by <b>referring</b> to productivity, revenue and costs.</p>
(c)	<p>Indoor home cleaning and outdoor house cleaning are related services for <i>Craig's Cleaners</i> because the business could provide either/both services, since they require similar resources and skills: both require cleaning products, staff with cleaning skills, the same uniforms, protective gear, and cars to move staff and equipment between houses.</p>	<p><b>Identifies or defines</b> the idea of a related service.</p>	<p><b>Explains</b> related service (with an example of a transferable resource).</p>	

Q3	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence
(d)	<p><i>Craig's Cleaners' weekly supply of outdoor house cleaning services</i></p> 	Shifts the outdoor house cleaning supply curve to the left.	Correctly shows shift with <b>appropriate labelling</b> .	
(e)	<p>The new technology has increased the productivity and profitability of indoor home cleaning services. Vacuum cleaners are only useful for indoor cleaning, so these gains do not apply to outdoor cleaning as well. Therefore, although the profitability of outdoor cleaning has not changed, it is now less profitable than before, compared with indoor cleaning.</p> <p>Because outdoor cleaning is now relatively less profitable than indoor home cleaning, <i>CC</i> will choose to focus more on cleaning home indoors and will shift resources (e.g. workers, time, machinery, cleaning products) from outdoor to indoor house cleaning to maximise their profit.</p> <p>The supply of outdoor house cleaning will therefore decrease, which means the supply curve will shift to the left from <b>S</b> to <b>S<sub>1</sub></b>.</p>	<b>Explains</b> a decrease in the supply of outdoor house cleaning as new technology is used.	<b>Fully explains</b> the decrease in supply of outdoor house cleaning with the idea of relative profitability OR switching of resources.	<b>Clearly links</b> the introduction of new technology with an increase in supply of indoor home cleaning and a decrease in supply of outdoor house cleaning, <b>using profitability AND switching of resources</b> .

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