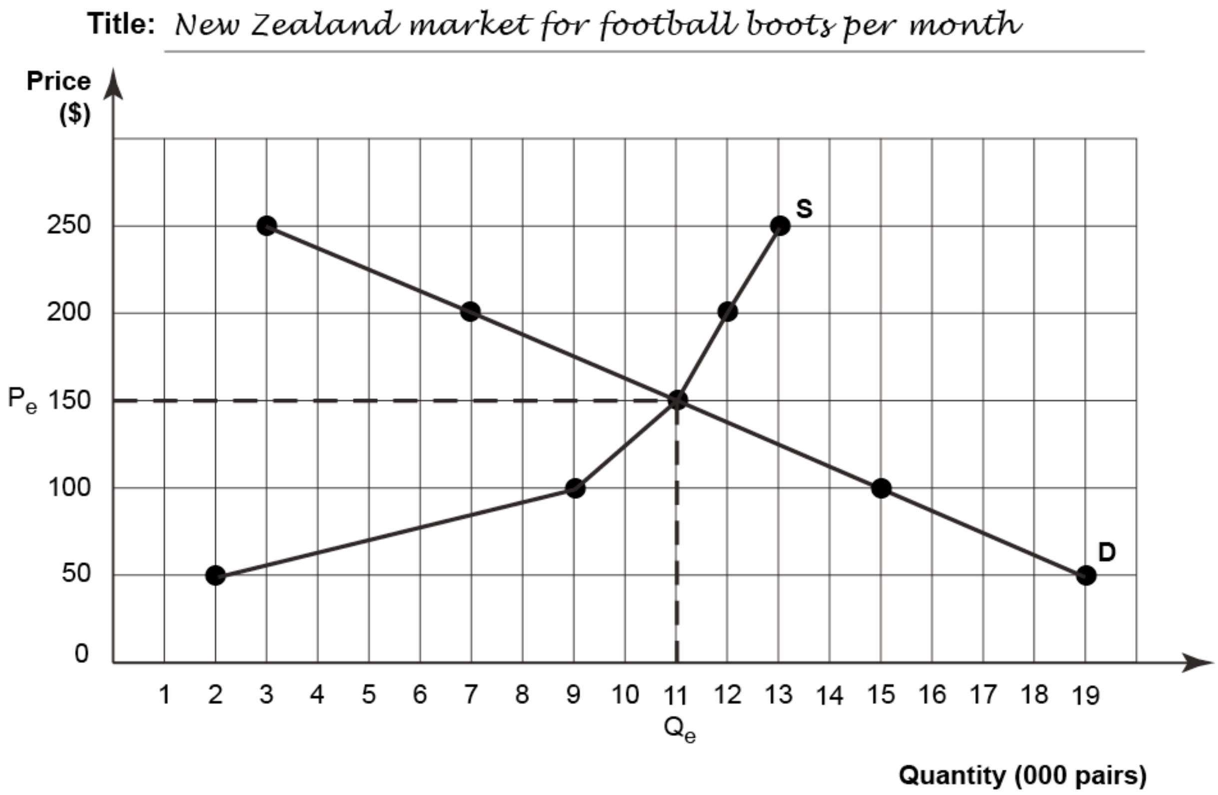
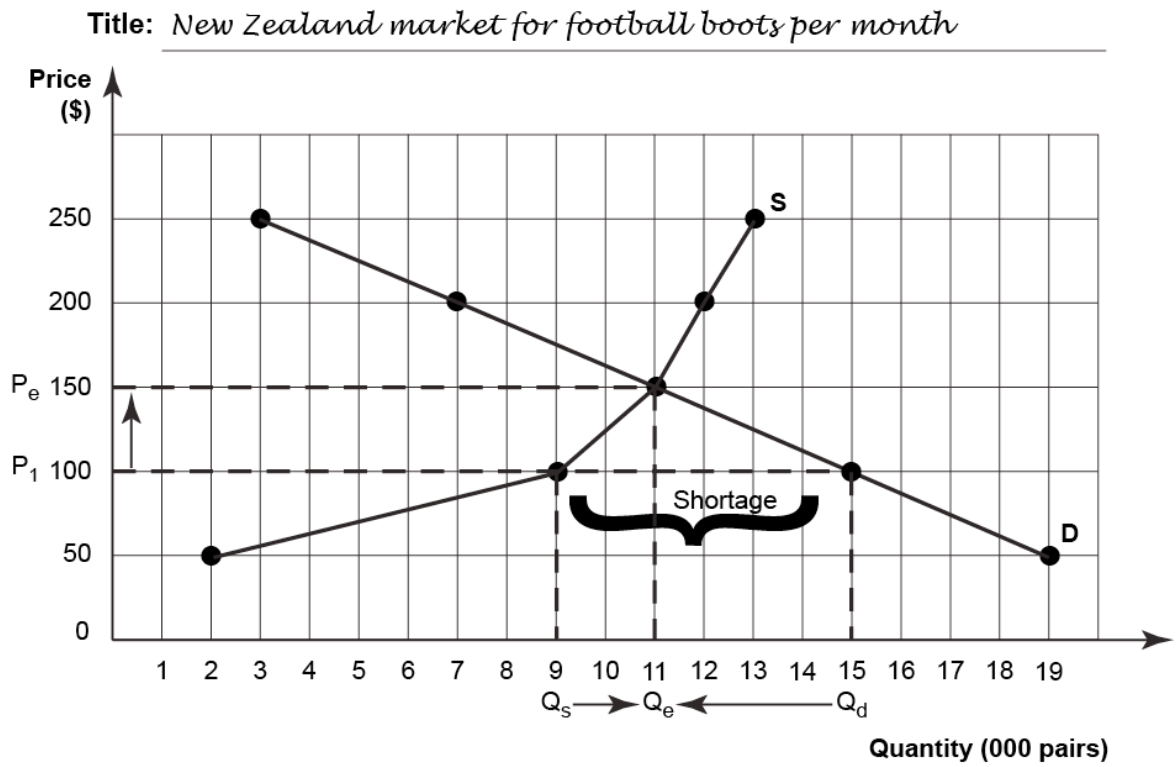
## Assessment Schedule – 2013

## Economics: Demonstrate understanding of how consumer, producer and / or government choices affect society, using market equilibrium (90986)

### Evidence Statement

| Question | Evidence |
|---|---|
| **ONE** (a) |   |
| (b) |   |

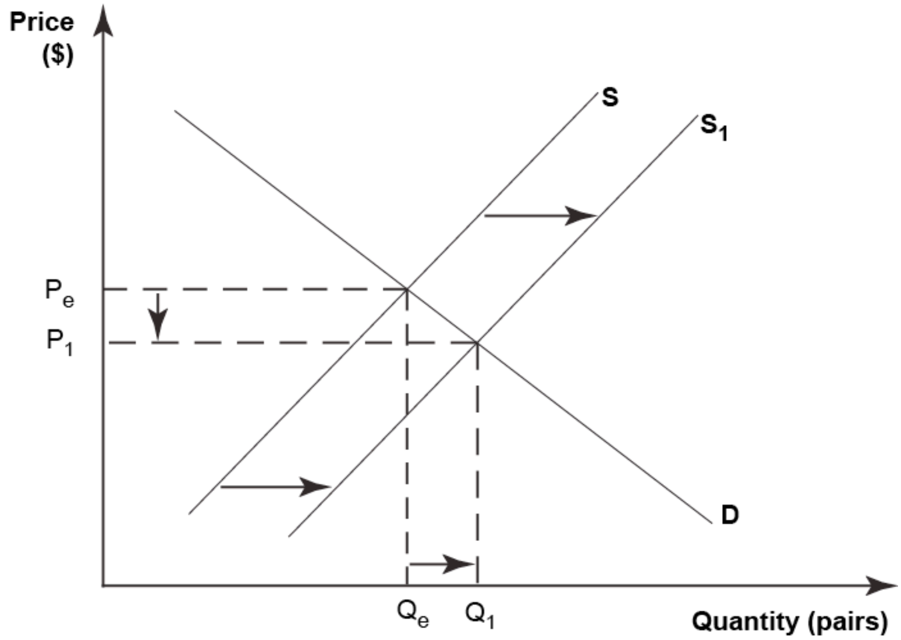
| Question | Evidence statement |
|---|---|
| **ONE** (c) | At $100 there is a shortage of 6 000 pairs of boots, as there are 15 000 boots demanded – but only 9 000 boots supplied. Boot buyers will bid up the price of boots, as they fear missing out.<br>As the price rises, quantity demanded will fall (from 15 000 pairs to 11 000 pairs) as some players can no longer afford to buy the now more expensive boots. This is the law of demand.<br>Meanwhile, the sellers of boots will increase the quantity supplied (from 9 000 to 11 000 pairs), as boots will now be more profitable. This is the law of supply.<br>The price of boots will stop rising when the price reaches $150, at which the quantity demanded will equal quantity supplied of 11 000 pairs. |

| N1 | N2 | A3 | A4 | M5 | M6 | E7 | E8 |
|---|---|---|---|---|---|---|---|
| Shows partial understanding with only ONE of:<br>• correct plotting of most points<br>• identifies a shortage<br>• describes a shortage<br>• identifies a rise in price. | Shows partial understanding with TWO of:<br>• correct plotting of most points<br>• identifies a shortage<br>• describes a shortage<br>• identifies a rise in price. | Shows understanding with correct plotting of 9 points, with equilibrium point identified and ONE of:<br>• identifies a shortage<br>• describes a shortage<br>• identifies a rise in price. | Shows breadth of understanding with correct plotting of all points, with equilibrium point identified and TWO of:<br>• identifies a shortage<br>• describes a shortage<br>• identifies a rise in price. | Detailed explanation of how equilibrium is restored.<br>Any THREE of:<br>• uses data to identify a shortage<br>• explains the shortage ie $Q_d > Q_s$<br>• explains why price will increase (ie. consumer will bid up price)<br>• applies law of supply (ie P↑ $Q_s$ ↑)<br>• applies law of demand (ie P↑ $Q_d$ ↓) | Detailed explanation of how equilibrium is restored.<br>Any FOUR of:<br>• uses data to identify a shortage<br>• explains the shortage ie $Q_d > Q_s$<br>• explains why price will increase (ie consumer will bid up price)<br>• applies law of supply (ie P↑ $Q_s$ ↑)<br>• applies law of demand (ie P↑ $Q_d$ ↓) | Comprehensive explanation of how equilibrium is restored with some reference to data / graph.<br>Only minor errors in use of economic terms.<br>• explains shortage using data – calculates size of shortage<br>• explains why price will increase (ie consumer will bid up price)<br>• explains why $Q_s$ rises as P increases (ie: more profitable)<br>• explains why $Q_d$ falls as P increases (ie: less affordable)<br>• until market clears, $Q_s = Q_d$, equilibrium restored – figures not stated. | Comprehensive explanation of how equilibrium is restored with specific reference to data / graph.<br>Uses appropriate economic terms.<br>• explains shortage using data – calculates size of shortage<br>• consumer will bid up price to obtain available boots<br>• explains why $Q_s$ rises as P increases (ie: more profitable)<br>• explains why $Q_d$ falls as P increases (ie: less affordable<br>• equilibrium restored at $150 & $Q_e$ = 11 000 pairs. |

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

<table>
<tr><th>Question</th><th>Evidence statement</th></tr>
<tr><td>TWO</td><td>

**New Zealand market for football boots**




With more football boots entering New Zealand, the market supply of boots will rise.

This is shown as a shift of the supply curve to the right from S – $S_1$. There are more boots being supplied at each and every price.

This will create a surplus of boots at the existing equilibrium price. As a result, the stores will reduce their prices in order to get rid of unsold stocks. With cheaper boots available, the quantity of boots demanded will rise as consumers grab cheap boots. As the price of football boots fall, more boots will be sold.

Football boot consumers will be better off as they now have access to cheaper boots. This may also entice:

- some consumers to buy a spare pair of boots
- those who do not play soccer may now wish to take it up as the boots are cheaper
- football club memberships will possibly grow.

Football consumers will have greater choice, as more variety of boots enter the market. With cheaper boots, consumers may now spend more on other items. Some consumers may switch away from more expensive activities.

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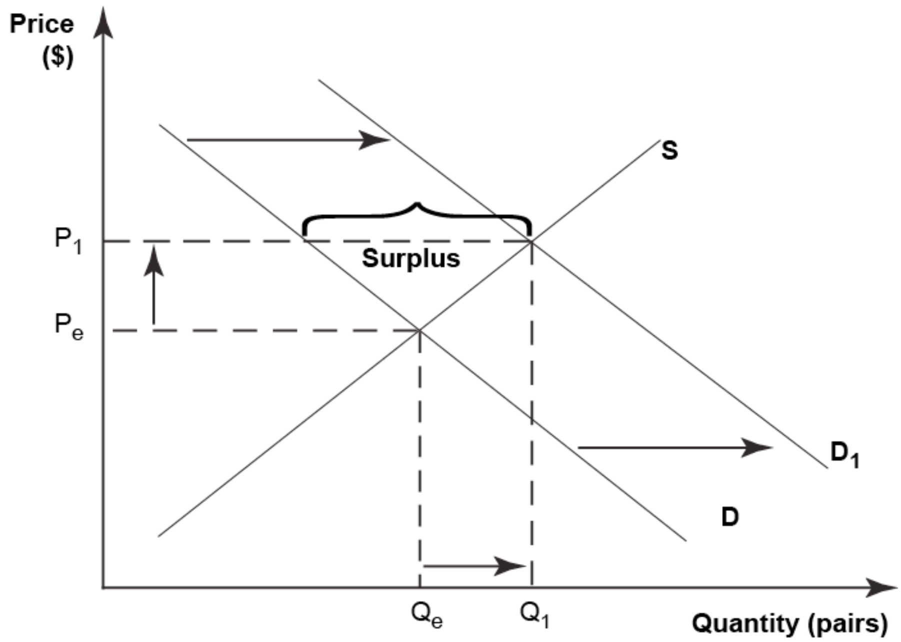
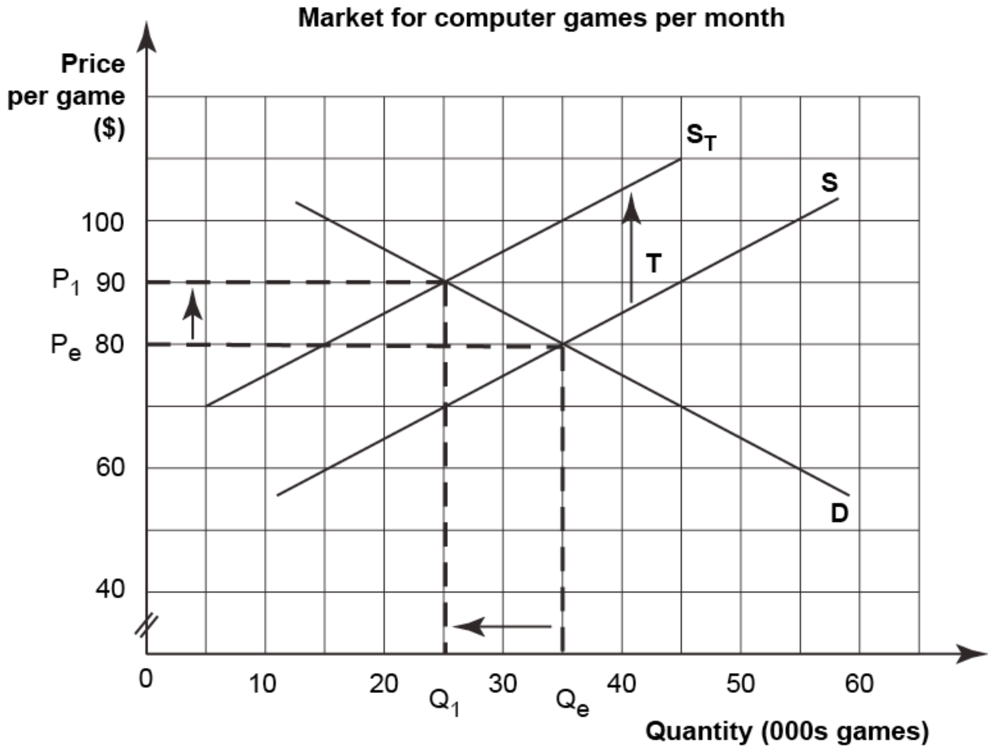
| N1 | N2 | A3 | A4 | M5 | M6 | E7 | E8 |
|---|---|---|---|---|---|---|---|
| Shows partial understanding with only ONE of:<br>• shifts supply curve to right<br>• states that market supply will rise<br>• identifies a fall in price<br>• identifies a rise in quantity sold. | Shows partial understanding with TWO of:<br>• shifts supply curve to right<br>• states that market supply will rise<br>• identifies a fall in price<br>• identifies a rise in quantity sold. | Shows understanding with THREE of:<br>• shifts supply curve to right<br>• states that market supply will rise<br>• identifies a fall in price<br>• identifies a rise in quantity sold. | Shows breadth of understanding with FOUR of:<br>• shifts supply curve to right<br>• states that market supply will rise<br>• identifies a fall in price<br>• identifies a rise in quantity sold. | Detailed explanation of the change in supply:<br>• shifts S to the right, new equilibrium identified<br>*AND* explains THREE of:<br>• market supply rising due to more boots being imported<br>• fall in price due to excess supply<br>• producers lower price to clear surplus / excess goods<br>• As price decreases - $Q_d$ (not D) increases<br>• benefit to consumer. | Detailed explanation of the change in supply:<br>• shifts S to the right, new equilibrium identified<br>*AND* explains FOUR of:<br>• market supply rising due to more boots being imported<br>• fall in price due to excess supply<br>• producers lower price to clear surplus / excess goods<br>• $Q_d$ (not D) increases<br>• benefit to consumer. | Comprehensive explanation of the effect of a change in supply on market equilibrium and consumers.<br>Only minor errors in use of economic terms, *AND*:<br>• links reasons for increased market supply to shift of S to right or S- $S_1$<br>• links fall in price to excess supply / surplus and producers' reasons for decreasing prices<br>• links decrease in price to increase in $Q_d$<br>*OR*<br>benefit for the consumer.<br><br>Ref $P_e$ to $P_1$, $Q_e$ to $Q_1$, S to $S_1$ are used and consistent with changes shown on graph | Comprehensive explanation of the effect of a change in supply on market equilibrium and consumers in context.<br>Uses appropriate economic terms eg quantity demanded not demand, *AND*:<br>• links reasons for increased market supply to shift of S to right or S- $S_1$<br>• links fall in price to excess supply and producers' reasons for decreasing prices<br>• links decrease in price to increase in $Q_d$<br>• benefit for the consumer.<br><br>Ref $P_e$ to $P_1$, $Q_e$ to $Q_1$, S to $S_1$ are correct and consistent with changes shown on graph |

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

| Question | Evidence statement |
|---|---|
| THREE | **New Zealand market for football boots**<br><br><br>Non-price methods firms can use to increase market demand for football boots:<br>• to make a complementary good cheaper, eg shirts<br>• to offer a giveaway, eg spare laces<br>• to advertise the boots – this will make consumers aware of the boots<br>• have a celebrity endorse the boots – consumers may trust the brand if a celebrity endorses it<br>• firms may sponsor a sports team, therefore consumers may identify with the brand and be loyal customers<br>• offer a loyalty scheme where buying boots may make consumers eligible for other benefits<br>• have a competition – all buyers of boots go into a draw for a prize.<br>This would entice consumers to buy the boots at the higher price, $P_1$ and therefore shift the demand curve from D – $D_1$. The increase in sales will reduce the unsold stocks. Once the demand curve shifts to $D_1$, there will no longer be a surplus as all the leftover boots will be sold.<br>The sellers would increase their revenues because they are selling more boots ($Q_e$ to $Q_1$) at the higher price of $P_1$.<br>Profits would rise since the difference between revenue and costs would grow (as long as the cost of the promotion did not outweigh the increase in revenue). |

| N1 | N2 | A3 | A4 | M5 | M6 | E7 | E8 |
|---|---|---|---|---|---|---|---|
| Shows partial understanding with only ONE of:<br>• identifies $P_1$ as a price with a surplus<br>• labels the surplus of boots at $P_1$<br>• identifies ONE non-price method<br>• shifts the demand curve to the right<br>• states that football boot sellers' revenue will increase. | Shows partial understanding with TWO of:<br>• identifies $P_1$ as a price with a surplus<br>• labels the surplus of boots at $P_1$<br>• identifies ONE non-price method<br>• shifts the demand curve to the right<br>• states that football boot sellers' revenue will increase. | Shows understanding with THREE of<br>• identifies $P_1$ as a price with a surplus<br>• labels the surplus of boots at $P_1$<br>• identifies ONE non-price method<br>• shifts the demand curve to the right<br>• states that football boot sellers' revenue will increase. | Shows breadth of understanding with FOUR of:<br>• identifies $P_1$ as a price with a surplus<br>• labels the surplus of boots at $P_1$<br>• identifies ONE non-price method<br>• shifts the demand curve to the right<br>• states that football boot sellers' revenue will increase. | Detailed explanation of the effect on equilibrium:<br>• graph correct & shifts D to the right to eliminate the surplus<br>*AND ONE of*<br>Explains<br>• how a non-price method increases demand<br>• how demand shifts to eliminate surplus<br>• the effect on sellers' revenue<br>• the effect on sellers' profit | Detailed explanation of the effect on equilibrium:<br>• graph correct & shifts D to the right to eliminate the surplus<br>*AND TWO of*<br>Explains:<br>• how a non-price method increases demand<br>• how demand shifts to eliminate surplus<br>• the effect on sellers' revenue<br>• the effect on sellers' profit | Comprehensive explanation of the effect of the non-price method. **Mostly** in context.<br>Only minor errors in use of economic terms.<br>*AND THREE of*<br>Explains:<br>• how a non-price method increases demand<br>• how demand shifts to eliminate surplus<br>• the effect on sellers' revenue<br>• the effect on sellers' profit<br><br>Ref $P_e$ to $P_1$, $Q_e$ to $Q_1$, D to $D_1$ are used and consistent with changes shown on graph. | Comprehensive explanation of the effect of the non-price method, **in context.**<br>Uses appropriate economic terms eg quantity supplied not supply.<br>• how a non-price method increases demand<br>• how demand shifts to eliminate surplus<br>• the effect on sellers' revenue<br>*AND*<br>• that revenue needs to outweigh the cost for profits to increase.<br><br>Ref $P_e$ to $P_1$, $Q_e$ to $Q_1$, D to $D_1$ are correct and consistent with changes shown on graph. |

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

| Question | Evidence |
|---|---|
| **FOUR** (a) |  |
| (b) | Referring to the graph above, identify and calculate the:<br>i. Quantity consumers buy — Before: 35 000 games — After: 25 000 games<br>ii. Price consumers pay — Before: $80 per game — After: $90 per game<br>iii. Price sellers receive — Before: $80 per game — After: $70 per game<br>iv. Total revenue per month to the government of this tax: $500 000 |
| (c) | The price paid by consumers will rise as computer game sellers pass some of the tax onto the consumer ($10).<br>Gaming consumers will be worse off because they must now pay $10 more for each game and there are 10 000 fewer games being purchased / demanded. Consumer spending on computer games decreases by $550 000 ($2 800 000 to $2 250 000).<br>The seller's price will fall as tax is paid to the government. Sellers are worse off. Their revenues fall as they sell 10 000 fewer games and receive $10 less per game. Sellers' revenue decreases by $1 050 000 ($2 800 000 to $1 750 000).<br>The government will gain tax of $20 per game sold and now that 25 000 games are sold per month they will get revenue of $500 000 per month.<br>In the long term, this is money that can be used to help reduce the health costs related to people who get addicted to computer games, but also be used to fund programmes that get young people active, eg sports, dance … or the Government may decide to put this tax into other areas of spending that benefits others, eg welfare payments, so society will benefit.<br>*OR*<br>Consumers may reduce their computer game time and become more active, so long-term health improves with lower costs to society. |

| N1 | N2 | A3 | A4 | M5 | M6 | E7 | E8 |
|---|---|---|---|---|---|---|---|
| Shows partial understanding with only ONE of:<br>• shifts the supply curve to the left<br>• labels a higher price<br>• labels a lower quantity. | Shows partial understanding with TWO of:<br>• shifts the supply curve to the left<br>• labels a higher price<br>• labels a lower quantity. | Shows understanding with ALL of:<br>• shifts the supply curve to the left<br>• labels a higher price<br>• labels a lower quantity. | Shows breadth of understanding with ALL of:<br>• shifts S to the left correctly<br>• labels a higher price<br>• labels a lower quantity<br>*AND* TWO of:<br>• quantity consumers buy before and after<br>• price consumers pay before and after<br>• price sellers receive before and after<br>• government revenue. | Detailed explanation of effect of sales tax.<br>• shifts S to the left correctly<br>*AND*<br>correctly stating THREE of:<br>• quantity consumers buy before and after<br>• price consumers pay before and after<br>• price sellers receive before and after<br>• government revenue. | Detailed explanation of effect of sales tax.<br>• shifts S to the left correctly<br>*AND*<br>correctly stating FOUR of:<br>• quantity consumers buy before and after<br>• price consumers pay before and after<br>• price sellers receive before and after<br>• government revenue. | Comprehen-sive explanation of the effect of sales tax by correctly stating:<br>• quantity consumers buy before and after<br>• price consumers pay before and after<br>• price sellers receive before and after<br>• government revenue<br>*AND*<br>explaining THREE of:<br>• change in price to consumer and effects on consumer spending<br>• change in price to producer and effects on sellers' revenue<br>• government revenue<br>• the benefit to society of the tax revenue.<br>Figures correct but not required to be repeated in the explanation; minor error in terms or specific terminology omitted. | Comprehen-sive explanation of the effect of sales tax by correctly stating:<br>• quantity consumers buy before and after<br>• price consumers pay before and after<br>• price sellers receive before and after<br>• government revenue<br>*AND*<br>explaining ALL of:<br>• uses data to explain change in price to consumer and effects on consumer spending<br>• uses data to explain changes in price to producer and effects on sellers' revenue<br>• government revenue<br>• the benefit to society of the tax revenue.<br>Figures and economic terms are correct and at least two figures cited in paragraph – one of which needs to be a calculation of consumer spending OR producer revenue. |

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

## Judgement Statement

| | Not Achieved | Achievement | Achievement with Merit | Achievement with Excellence |
|---|---|---|---|---|
| **Score range** | 0 – 8 | 09 – 17 | 18 – 24 | 25 – 32 |