**Mathematics Essential Year 11**

**Marking key for assessment task Practical Application 1, 2015**

**Topic -Buying a Car**

**Marks: 50**

|  |  |  |
| --- | --- | --- |
| **Question 1** | **8 marks** | **Marks** |
| **a)** | $495 x 48 = $23760 |  |
| Specific behaviour | | |
|  | Multiplies to find amount | **1** |
|  | Correctly calculates cost | **1** |
|  | | |
| **b)** | $479 x 48 m= $22992 |  |
| Specific behaviour | | |
|  | Multiplies to find amount | **1** |
|  | Correctly calculates cost | **1** |
|  | | |
| **c)** | $465 x 48 = $22320 |  |
| Specific behaviour | | |
|  | Multiplies to find amount | **1** |
|  | Correctly calculates cost | **1** |
|  | | |
| **d)** | Alliance Mutual  Repayments and total cost are lower |  |
| Specific behaviour | | |
|  | Correct finance company | **1** |
|  | Correct reason | **1** |
|  | | |
| **2.** | **6 marks** |  |
| **a)** | $63.40 x 12 + $760.80 |  |
| Specific behaviour | | |
|  | Multiplies to find amount | **1** |
|  | Correctly calculates cost | **1** |
|  | | |
| **b)** | $194 + $16.40 + $13.50 = $223.90 |  |
| Specific behaviour | | |
|  | Adds to find amount | **1** |
|  | Correctly calculates cost | **1** |
|  | | |
| **c)** | 12 months. It is the cheaper option overall. |  |
| Specific behaviour | | |
|  | Correct choice | **1** |
|  | Valid reason | **1** |
| **3.** | **(4 marks)** |  |
|  | $46.50 x 4 = $186 $179 x 2 = $358  $186 + $14.99 + $89.99 + $358 = $648.98 |  |
| Specific behaviour | | |
|  | Multiply to find cost of tyres | **1** |
|  | Multiply to find cost of servicing | **1** |
|  | Add to find total cost | **1** |
|  | Calculate cost correctly | **1** |
|  | | |
| **4.** | **(6 marks)** |  |
| **a)** | $1.34 x 40 = $53.60 |  |
| Specific behaviour | | |
|  | Multiplies to find amount | **1** |
|  | Correctly calculates cost | **1** |
|  | | |
| **b)** | 52 ÷ 2 = 26 times |  |
|  | Specific behaviour |  |
|  | Divides to find amount | **1** |
|  | Correctly calculates number of times | **1** |
|  | | |
| **c)** | $53.60 x 26 = $1393.60 |  |
| Specific behaviour | | |
|  | Multiplies to find amount | **1** |
|  | Correctly calculates cost | **1** |
|  | | |
| **d)** | 600 x 26 = 15600 km |  |
| Specific behaviour | | |
|  | Multiplies to find amount | **1** |
|  | Correctly calculates cost | **1** |
|  | | |
| **5.** | **(15 marks)** |  |
|  | |  |  |  |  | | --- | --- | --- | --- | | **Expense** | **Amount over 1 year** | **Amount per month** | **Amount per week** | | **Loan Payments** | $5580 | $465 | $107.31 | | **On road costs** | $1513.90 | $126.16 | $29.11 | | **Maintenance costs** | $648.98 | $54.08 | $12.48 | | **Fuel Costs** | $1393.60 | $116.13 | $26.80 | | **Total** | $9136.48 | $761.37 | $175.70 | |  |
|  | Divide yearly amount by 12 to find monthly amounts | **5** |
|  | Divide yearly amount by 52 to find weekly amounts | **5** |
|  | Calculate costs correctly | **5** |
|  | | |
| **6.** | **(9 marks)** |  |
| **a)** | $70 + $80 + $45 + $175.70 = $370.70 |  |
| Specific behaviour | | |
|  | Adds to find amount | **1** |
|  | Correctly calculates cost | **1** |
| **b)** | 940 ÷ 2 = $470  $470 - $370.70 = $99.30 |  |
| Specific behaviour | | |
|  | Divides wage to find weekly amount | **1** |
|  | Subtracts to find amount left | **1** |
|  | Calculates amount left correctly | **1** |
|  | | |
| **c)** | $790 + $1200 = $1990 |  |
|  | Adds to find amount | **1** |
|  | | |
| **d)** | $1990 ÷ 52 = $38.27 |  |
| Specific behaviour | | |
|  | Divides by 52 to find weekly amount | **1** |
|  | Calculates amount correctly | **1** |
|  | | |
| **e)** | Yes |  |
| Specific behaviour | | |
|  | Recognises that $38.70 is less than $99.30 that is left over | **1** |