**Mathematics Essential Year 11**

**Marking key for assessment task response 1, 2015**

**Topic -Numbers**

**Marks: 55**

|  |  |  |
| --- | --- | --- |
| **Question 1** | **2 marks** | **Marks** |
| **a)** | 12 + 18 = 30 |  |
| Specific behaviour | | |
|  | Multiplies before adding | **1** |
|  | | |
| **b)** | 6 x 12 = 72 |  |
| Specific behaviour | | |
|  | Calculates inside of brackets first | **1** |
|  | | |
| **2.** | **2 marks** |  |
| **a)** | 63.53 |  |
| Specific behaviour | | |
|  | Rounds correctly | **1** |
|  | | |
| **b)** | 453.70 |  |
| Specific behaviour | | |
|  | Rounds correctly | **1** |
|  | | |
| **3.** | **4 marks** |  |
| **a)** | 47 – 12 = 35 |  |
| Specific behaviour | | |
|  | Subtracts to determine correct answer | **1** |
|  | | |
| **b)** | 1099 + 26 = 1125 |  |
| Specific behaviour | | |
|  | Adds to determine correct answer | **1** |
|  | | |
| **c)** | $7.50 x 3 = $22.50 |  |
| Specific behaviour | | |
|  | Multiplies to determine correct answer | **1** |
|  | | |
| **d)** | $54 x 256 = $13824 |  |
| Specific behaviour | | |
|  | Multiplies to determine correct answer | **1** |
|  | | |
| **4.** | **4 marks** |  |
| **a)** | $24.30 x 35 = $850.50 |  |
| Specific behaviour | | |
|  | Multiplies to determine correct answer | **1** |
|  | Calculates answer correctly | **1** |
|  | | |
| **b)** | 2 x 24.30 x 3/2 = $72.90  850.50 + 72.90 = $923.40 |  |
| Specific behaviour | | |
|  | Multiplies by 1.5 to determine time-and-a half | **1** |
|  | Calculates correct answer | **1** |
|  | | |
| **5.** | **2 marks** |  |
| **a)** | 8 x 6 = $48 |  |
| Specific behaviour | | |
|  | Rounds $7.99 to $8 and multiplies to get correct answer | **1** |
|  | | |
| **b)** | 11 x 12 = 132 m |  |
| Specific behaviour | | |
|  | Rounds 10.7 to 12 and multiplies to get correct answer | **1** |
|  | | |
| **6.** | **4 marks** |  |
| **a)** | Rounds correctly to 10.3 | **1** |
|  | | |
| **b)** | Rounds correctly to 55.1 | **1** |
|  | | |
| **7.** | **10 marks** |  |
| **a)** | 500 x 20 = 10000 bags |  |
| Specific behaviour | | |
|  | Multiplies to determine answer | **1** |
|  | Calculates correct answer | **1** |
|  |  |  |
| **b)** | 4500 ÷ 500 = 9 packs |  |
| Specific behaviour | | |
|  | Divides to determine answer | **1** |
|  | Calculates correct answer | **1** |
|  | | |
| **c)** | 500, 100, 1500, 2000 |  |
| Specific behaviour | | |
|  | Recognises that multiples have a constant difference of 500 | **1** |
|  | Recognises that first multiple is 500 | **1** |
|  | | |
| **d)** | 4500 is the ninth multiple of 500 |  |
| Specific behaviour | | |
|  | Recognises 4500 needs to be divided by 500 | **1** |
|  | Has correct multiple | **1** |
|  | | |
| **e)** | 1230 ÷ 500 = 2.46 3 packs |  |
| Specific behaviour | | |
|  | Divides by 500 | **1** |
|  | Rounds up to 3 packs | **1** |
|  | | |
| **8.** | **6 marks** |  |
| **a)** | $27.50 x 6 = $165 |  |
| Specific behaviour | | |
|  | Multiplies to find answer | **1** |
|  | Calculates correct answer | **1** |
|  | | |
| **b)** | $27.50 x 15.5 = $426.25 |  |
| Specific behaviour | | |
|  | Multiplies to find answer | **1** |
|  | Calculates correct answer | **1** |
|  | | |
| **c)** | $687.50 ÷ $27.50 = 25 m |  |
| Specific behaviour | | |
|  | Divides to find answer | **1** |
|  | Calculates correct answer | **1** |
|  | | |
| **9.** | **6 marks** |  |
| **a)** | 3 years 3 months |  |
| Specific behaviour | | |
|  | Recognise that .25 is a 1/4 | **1** |
|  | Recognise that ¼ of 12 months is 3 months | **1** |
|  | | |
| **b)** | Recognise that 0.37 m is 37 cm | **1** |
|  | | |
| **c)** | Recognise that $0.26 is 26 cents | **1** |
|  | | |
| **d)** | 26.25 x 12 = 315 months |  |
| Specific behaviour | | |
|  | Multiply by 12 to convert years to months | **1** |
|  | Calculate correct answer | **1** |
|  | | |
| **10.** | **10 marks** |  |
| **a)** | $79500 ÷ 4 = $19875 |  |
| Specific behaviour | | |
|  | Recognise that ¼ means to divide by 4 | **1** |
|  | Calculate correct answer | **1** |
|  | | |
| **b)** | $95 x 52 = $4940 |  |
| Specific behaviour | | |
|  | Multiply by 52 to find cost for year | **1** |
|  | Calculate correct answer | **1** |
|  | | |
| **c)** | $350 x 4 = $1400 |  |
| Specific behaviour | | |
|  | Multiply to find cost for year | **1** |
|  | Calculate correct answer | **1** |
|  | | |
| **d)** | $64.90 x 4 = $259.60 |  |
| Specific behaviour | | |
|  | Multiply to find cost of 4 tyres | **1** |
|  | Calculate correct answer | **1** |
|  | | |
| **e)** | $19875 + $4940 + $1400 + $259.60 |  |
| Specific behaviour | | |
|  | Add to find deductions for year | **1** |
|  | Calculate correct answer | **1** |
|  | | |
| **11.** | **5 marks** |  |
| **a)** | $21.50 + $10.50 = $32  $32 x 48 = $1536 |  |
| Specific behaviour | | |
|  | Add to find cost per head | **1** |
|  | Multiply to find total cost | **1** |
|  | Calculate correct answer | **1** |
|  | | |
| **b)** | $1920 ÷ $32 = 60 people |  |
| Specific behaviour | | |
|  | Multiply to find total cost | **1** |
|  | Calculate correct answer | **1** |