SAMPLE ASSESSMENT TASKS

MATHEMATICS
FOUNDATION YEAR 11

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(6 marks)

Sample assessment task

Mathematics - Foundation Year 11

Task 3 - Unit 1

Assessment type: Response

Conditions

1.

Time for the task: 10 minutes In class, no calculator permitted

Marks: 11 marks

Task weighting: 4% of the school mark for this pair of units

- (a) 6+6=
 - (b) Show how 6 + 8 = 14
 - (c) 60 + 80 =
 - (d) 6 + 28 =
 - (e) 60 + 180 =

2. (a) 41 + 36 = (1 mark)

(b) 54 + 27 = (2 marks)

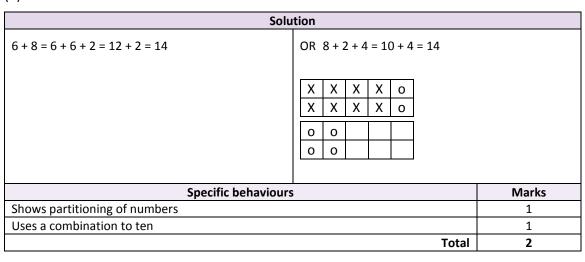
3. \$7.40 + \$5.95 = (2 marks)

Marking key for sample assessment Task 3 - Unit 1

1 (a) 6+6=

| Solution | | | |
|-------------------------------|-------|--|--|
| 6 + 6 = 12 | | | |
| Specific behaviours | Marks | | |
| Recalls a basic addition fact | 1 | | |
| Total | 1 | | |

(b) Show how 6 + 8 = 14



(c) 60 + 80 =

| Solution | |
|---------------------------------------|-------|
| 60 + 80 = 140 | |
| Specific behaviours | Marks |
| Recognises place value in an addition | 1 |
| Total | 1 |

(d) 6 + 28 =

| Solution | | | |
|---------------------------------------|-------|--|--|
| 6 + 28 = 6 + 20 + 8 = 20 + 14 = 34 | | | |
| Specific behaviours | Marks | | |
| Uses place value to partition numbers | 1 | | |
| Total | 1 | | |

(e) 60 + 180 =

| Solution | | | |
|--|-------|--|--|
| 60 + 180 = 60 + 100 + 80 = 100 + 140 = 240 | | | |
| Specific behaviours | Marks | | |
| Uses place value to partition numbers | 1 | | |
| Total | 1 | | |

2. (a) 41 + 36 =

| Solution | | | |
|----------------------------------|-------|--|--|
| 41 + 36 = 40 + 30 + 1 +6 = 77 | | | |
| Specific behaviours | Marks | | |
| Uses partitioning to add numbers | 1 | | |
| Total | 1 | | |

(b) 54 + 27 =

| Solution | | | |
|------------------------------------|-------|--|--|
| 54 + 27 = 50 + 20 + 7 + 3 + 1 = 81 | | | |
| Specific behaviours | Marks | | |
| Determines correct tens value | 1 | | |
| Determines correct ones value | 1 | | |
| Total | 2 | | |

3. \$7.40 + \$5.95 =

| Solution | | |
|---|-------|--|
| \$7.40 + \$5.95 = \$7.35 + \$6.00 = \$13.35 | | |
| Specific behaviours | Marks | |
| Uses partitioning to regroup parts | 1 | |
| Calculates the amount | 1 | |
| Total | 2 | |

Sample assessment task

Mathematics - Foundation Year 11

Task 6 - Unit 1

Assessment type: Response

Conditions:

Time for the task: 20 minutes In class, no calculator permitted

Marks: 9 marks

Task weighting: 5% of the school mark for this pair of units

- 1. You have to prepare three different desserts. The first recipe uses 185 grams of sugar, the second one uses 250 grams and the third one uses 160 grams.
 - (a) How much sugar do you need to make all three desserts? (2 marks)

(b) You already have 350 grams of sugar in the pantry. Do you have enough sugar to make the three desserts? Explain how you made your decision.

(2 marks)

| 2. | The average rainfall in Perth for June is 175 mm. In June 2014, Perth received 81 mm less than the average. | | | | |
|----|--|------------------|--|-----------------------|--|
| | (a) | Write a numb | per sentence to answer the following question. | | |
| | | 'How much ra | ainfall did Perth receive in June 2014?' | (1 mark) | |
| | (b) | Calculate how | v much rainfall Perth received in June 2014. | (1 mark) | |
| 3. | Sim | on is building a | a house. His estimated costs are: | | |
| | Bloc | k of land | \$235 000 | | |
| | Hou | se | \$285 500 | | |
| | Plan | ning fees | \$5215 | | |
| | Wha | at is his estima | ted total cost to the nearest \$1000? | (1 mark) | |
| | (a) | 521 000 | | | |
| | (b) | 526 000 | | | |
| | (c) | 530 000 | | | |
| | (d) | 500 000 | | | |
| 4. | The normal price of petrol at a petrol station is \$1.60 per litre. A customer has a voucher that offers a saving of 4c per litre. How much does the customer pay per litre? (2 mar | | | her that (2 marks) | |
| | (a) | | | | |
| | | \$1.64 | | | |
| | (c) | \$1.56 | | | |
| | (d) | \$2.00 | | | |

Marking key for sample assessment Task 6 - Unit 1

- 1. You are preparing three different desserts. The first recipe uses 185 grams of sugar, the second one uses 250 grams and the third one uses 160 grams.
 - (a) How much sugar do you need to make all three desserts?

| Solution | | | |
|--|-------|--|--|
| 185 + 250 + 160 = 595 | | | |
| Specific behaviours | Marks | | |
| Uses addition to solve the problem | 1 | | |
| Correctly calculates the total amount of sugar | 1 | | |
| Total | 2 | | |

(b) You already have 350 grams of sugar in the pantry. Do you have enough sugar to make the three desserts? Explain how you came to your decision.

| Solution | | |
|--|-------|--|
| No, I do not have enough sugar. I would need another 245 grams because 595 – 350 = 245 grams | | |
| Specific behaviours | Marks | |
| States that there is not enough sugar to make the three desserts | 1 | |
| Uses subtraction to calculate the difference in the amounts | 1 | |
| Total | 2 | |

- 2. The average rainfall in Perth for June is 175 mm. In June 2014 Perth received 81 mm less than the average.
 - (a) Write a number sentence to answer the following question. 'How much rainfall did Perth receive in June 2014?'

| | | Solution | |
|----------------------------------|---------------------|---------------------|---|
| 81 + rainfall = 175 | or | 175 – 81 = rainfall | |
| | Specific behaviours | | |
| Writes a correct number sentence | | 1 | |
| | | Total | 1 |

(b) Calculate how much rainfall Perth received in June 2014.

| Solution | | |
|-----------------------------------|-------|--|
| 175 – 81 = 94 | | |
| Specific behaviours | Marks | |
| Calculates the amount of rainfall | 1 | |
| Total | 1 | |

3. Simon is building a house. His estimated costs are:

Block of land \$235 000

House \$285 500

Planning fees \$5215

What is his estimated total cost to the nearest \$1000?

- (a) 521 000
- (b) 526 000
- (c) 530 000
- (d) 500 000

| Solution | |
|--|-------|
| \$240 000 + 286 000 + 5200 + 500 = 525 700 ~ 526 000 | |
| So (b) is the estimated total cost | |
| Specific behaviours | Marks |
| Chooses correct estimate | 1 |
| Total | 1 |

- 4. The normal price of petrol at a petrol station is \$1.60 per litre. A customer has a voucher that offers a saving of 4c per litre. How much does the customer pay per litre?
 - (a) \$1.20
 - (b) \$1.64
 - (c) \$1.56
 - (d) \$2.00

| Solution | |
|---|-------|
| 160 cents - 4 cents = 156 cents or \$1.56 | |
| OR \$1.60 - 0.04 = \$1.56 | |
| Specific behaviours | Marks |
| Recognises place value for cents and dollars | 1 |
| Uses subtraction to calculate the cost of one litre of petrol | 1 |
| Total | 2 |

Sample assessment task

Mathematics – Foundation Year 11

Task 8 - Unit 1

Assessment type: Practical application

Conditions:

Time for the task: 50 minutes

In class under test conditions, calculator permitted

Marks: 25 marks

Task weighting: 8% of the school mark for this pair of units

Your class has been provided with a rectangular garden bed. You need to plant a hedge of plants around three sides of the garden bed.

The plants need to be planted 30 cm apart and 20 cm from the boundary of the garden bed.

Measure and mark where each plant will be placed and then work out how many plants you will need to order from the garden nursery.

Things to consider

- What measurements do you already have that will help you work out how many plants you need?
- What else do you need to know to find out the number of plants?
- How accurate do you need to be?
- What do you need to do to measure and mark where each plant will be placed?
- How will you know if you have determined an appropriate number of plants?

What is expected?

- 1. Mark the position to show where each plant will go in the space chosen for the garden bed.
- 2. Explain how you measured and marked these positions.
- 3. Work out how many plants you need and communicate this to your teacher.
- 4. Explain how you arrived at this number.

Marking key for sample assessment Task 8 - Unit 1

Preparing to carry out the task

Give the students the information and then have some discussion (either individually or in small groups) to ensure that they understand the task.

| Specific behaviours | Marks with support | Marks without support |
|---|--------------------------|-----------------------------|
| Responds appropriately to 'What part of the plant should you measure from when you work out the distance between the plants?' | 1 | 2 |
| Responds appropriately to 'Where will you start measuring from (front of bed, back of bed, side of bed)?' | 1 | 2 |
| Responds appropriately to 'What will you do if there is a bigger gap left at one end?' | 1 | 2 |
| Responds appropriately to 'If you move one plant, will you have to move the one next to it?' | 1 | 2 |
| Total | | 8 |

Carrying out the task

Solution will depend on the size of the initial garden bed. The teacher will need to assess the student's response based on the size of the garden bed and with reference to the behaviours displayed by the student in completing the task.

| Specific behaviours | Marks with support | Marks without support |
|--|--------------------------|-----------------------------|
| Chooses an appropriate measuring device (metre ruler, 30 cm ruler, measuring | 1 | 2 |
| tape) | - | _ |
| Shows a measurement between plants | 1 | 2 |
| Shows a measurement between plant and border | 1 | 2 |
| Fits the plants appropriately around the three sides | 1 | 2 |
| Accurately marks plant position 20 cm away from edge | 1 | 2 |
| Checks all measurements | 1 | 2 |
| Total | | 12 |

Conclusion

The number of plants is ...

Shows marked out space to indicate placement of plants

| Specific behaviours | Marks with support | Marks without support |
|--|--------------------------|-----------------------------|
| Shows markers for plants placed appropriately around the three sides | 1 | 2 |
| Shows an accurate placement where appropriate, of 30 cm between plants | 1 | 2 |
| Communicates the correct answer to the teacher | - | 1 |
| Total | | 5 |