

FULL MODEL ANSWERS

Q1. NON-CALCULATOR

Work out $2 + 7 \times 10$

$$= 2 + 70$$

.....
72

(Total for question = 1 mark)

Q2. NON-CALCULATOR

Work out $10 \times (3 + 5)$

$$= 10 \times 8$$

.....
80

(Total for question = 1 mark)

Q3. NON-CALCULATOR

(a) Work out $3 \times 5 + 7$

$$= 15 + 7$$

.....
22

(1)

(b) Work out 2^3

$$= 2 \times 2 \times 2$$

$$= 4 \times 2$$

.....
8

(1)

(c) Write brackets () in this statement to make it correct.

$$7 \times (2 + 3) = 35$$

either

or

$$(7 \times 2) + 3$$

$$7 \times (2 + 3)$$

$$= 14 + 3$$

$$= 7 \times 5$$

$$= 17$$

$$= 35$$

x

✓

(1)

(Total for question = 3 marks)

Q4. CALCULATOR ALLOWED

A teacher asks George to think of a number.

She then says, *first* *afterwards*

"Add 10 to your number and multiply the answer by 3"

George thinks of the number 5

He writes down

$$5 + 10 \times 3 = 35$$

What should George have written down?

$$(5 + 10) \times 3 = 45$$

(Total for question = 2 marks)

Q5. CALCULATOR ALLOWED

Jenny is asked to find the value of $12 - 2 \times 4$

Here is her working.

$$12 - 2 \times 4 = 10 \times 4 = 40$$

Jenny's answer is wrong.

(a) Explain what Jenny has done wrong.

↓
B
I
D
M
A
S

Jenny subtracted first. She should have multiplied first: $12 - 2 \times 4 = 12 - 8 = 4$

(1)

Rehan is asked to find the range of the numbers 3 1 8 7 5

biggest - smallest

$$\text{Range} = 5 - 3 = 2$$

Here is his working.

This is wrong.

(b) Explain why.

*The range is biggest minus smallest, $8 - 1 = 7$.
Rehan did not order the numbers.*

(1)

(Total for question = 2 marks)

Q6. CALCULATOR ALLOWED

Put a pair of brackets in each statement to make the statement true.

(Just 1 pair in each statement)

(i) $2 \times (7^2 - 2) = 94$

(ii) $16 \div (2 + 6) + 2 = 4$

↓
B
I
D
M
A
S

(1)

(1)

(Total for question = 2 marks)