GCSE FOUNDATION · REVISION MAT 3

Order of operations and inverses

1 Work out

(a) $7 \times 2 + 3 \times 4$

(b) $(15 - 9)^2 \div 3$

2 Put brackets into this calculation to make it correct.

$2 \times 7 + 3 = 20$

3 Dev says,

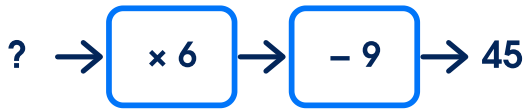
"$30 - 6 \times 2 = 48$"

Explain the mistake Dev has made.

4 Show that

$(7 - 2)^2 + 18 \div 6 = 28$

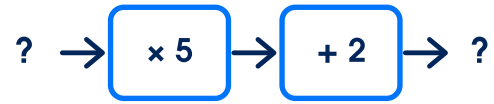
5 Here is a number machine.



The output is 45.

Work out the input.

6 Here is a number machine.



Amy puts a number in. Her output is 47.

Ben puts in a number that is 2 more than Amy's number.

Work out Ben's output.

ANSWERS · REVISION MAT 3

Order of operations and inverses

1 (a) **26**

(b) **12**

2 **2 × (7 + 3) = 20**

3 Dev did the operations in the wrong order. × and ÷ come before + and −.

30 − 6 × 2 = **18**

4 $5^2 + 3 = 25 + 3$

= 28 ✓

5 Work backwards using inverse operations:

45 + 9 = 54

54 ÷ 6 = 9

Input = **9**

6 Amy's input: (47 − 2) ÷ 5 = 9

Ben's input: 11

Ben's output: 11 × 5 + 2 = **57**

Mr&Mrs MATHS