GCSE FOUNDATION · REVISION MAT 1

Order of operations and inverses

1 Work out

(a) $3 + 4 \times 5$

(b) $(12 - 4)^2 \div 8$

2 Put brackets into this calculation to make it correct.

$5 + 3 \times 4 = 32$

3 Ben says,

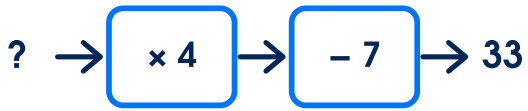
"$20 - 8 \div 4 = 3$"

Explain the mistake Ben has made.

4 Show that

$4 + 6^2 \div 3 - 2 = 14$

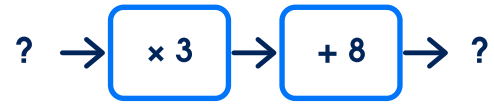
5 Here is a number machine.



The output is 33.

Work out the input.

6 Here is a number machine.



Amy puts a number in. Her output is 44.

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

Work out Ben's output.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 1

Order of operations and inverses

1 (a) **23**

(b) **8**

2 **(5 + 3) × 4 = 32**

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

20 − 8 ÷ 4 = **18**

4 4 + 36 ÷ 3 − 2 = 4 + 12 − 2

= 14 ✓

5 Work backwards using inverse operations:

33 + 7 = 40

40 ÷ 4 = 10

Input = **10**

6 Amy's input: (44 − 8) ÷ 3 = 12

Ben's input: 14

Ben's output: 14 × 3 + 8 = **50**

Mr&Mrs MATHS