GCSE HIGHER · REVISION MAT 1

Order of operations and inverse operations

1 Work out

$3 + 4 \times 5$

2 Work out

$(8 - 3)^2 \div 5 + 1$

3 Add brackets to make this true.

$6 + 4 \times 3 - 1 = 29$

4 I think of a number.

I multiply it by 3,
subtract 7, then halve it.

The answer is 10.

What was my number?

5 Use an inverse operation to check that

$312 \div 24 = 13$

6 Use each of 2, 3, 4 and 5 once, with any operations and brackets, to make 24.

7 Show that

$$\frac{3 + 5 \times 2}{2^2 - 3} = 13$$

8 A number is squared, multiplied by 2, then 7 is subtracted.

The answer is 43.

Find the possible numbers.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 1

Order of operations and inverse operations

1 3 + 20

23

2 25 ÷ 5 + 1

6

3 **(6 + 4) × 3 – 1 = 29**

4 Reverse: 10 × 2 = 20

20 + 7 = 27

27 ÷ 3 = 9

5 13 × 24 = 312 ✓

The division is correct.

6 **e.g. 4 × (5 + 3 – 2) = 24**

7 $\frac{3 + 10}{4 - 3} = \frac{13}{1}$

= 13

8 $2x^2 - 7 = 43$

$x^2 = 25$

5 or –5

Mr&Mrs MATHS