GCSE FOUNDATION · REVISION MAT 5

Index notation

1 Write each as a single power.

(a) $2^6 \times 2^3$

(b) $8^9 \div 8^6$

2 (a) Write $(6^2)^5$ as a single power of 6.

(b) Work out the value of 5^3

3 Nia says,

"$6^3 \times 6^3 = 36^6$"

Explain the mistake Nia has made.

4 Show that $6^2 - 2^5 = 4$

5 Find the value of n.

$4^n \times 4^5 = 4^{15} \div 4^4$

6 Which is bigger, 2^8 or 4^4?

Show how you decide.

Mr&Mrs MATHS

1 (a) 2^9

(b) 8^3

2 (a) 6^{10}

(b) 125

3 When multiplying powers of the same base, add the powers but keep the base the same.

$6^3 \times 6^3 = 6^6$

ANSWERS · REVISION MAT 5

Index notation

4 $36 - 32 = 4$ ✓

5 Right side = 4^{11}

$n + 5 = 11$

$n = 6$

6 $2^8 = 256$

$4^4 = 256$

They are equal