GCSE FOUNDATION · REVISION MAT 2

Algebraic notation

1 Write these in a simpler way.

(a) $b + b + b + b$

(b) $3 \times b \times d$

(c) $d \times d \times d$

2 Write down whether each one is an **expression**, an **equation**, a **formula** or an **identity**.

(a) $P = 4s$

(b) $7y - 2$

(c) $3(n - 2) \equiv 3n - 6$

(d) $4x - 1 = 11$

3 Ben says,

"$3a$ and a^3 mean the same thing."

Explain why Ben is wrong.

4 Which of these are the same as $8y$?

$4 \times 2y$, $y + 8$, $5y + 3y$, $2y \times 4$, $8 + y$

Explain how you decide.

5 A rectangle has length $3x$ and width $2y$.

(a) Write an expression for its perimeter.

(b) Write an expression for its area.

(c) Work out the area when $x = 2$ and $y = 4$.

6 The three cards add up to

$10a - b$. $3a + 2b$? $5a$

Work out the expression on the missing card.

Mr&Mrs MATHS

1 (a) $4b$

(b) **$3bd$**

(c) d^3

2 (a) **formula**

(b) **expression**

(c) **identity**

(d) **equation**

3 $3a$ and a^3 are different. Try $a = 4$: $3 \times 4 = 12$, but $4^3 = 64$

Not the same

ANSWERS · REVISION MAT 2

Algebraic notation

4 **$4 \times 2y$, $5y + 3y$, $2y \times 4$**

Each simplifies to $8y$.

5 (a) **$6x + 4y$**

(b) **$6xy$**

(c) **48**

6 $10a - b - (3a + 2b) - (5a)$

$= $ **$2a - 3b$**

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