GCSE FOUNDATION · REVISION MAT 1

Algebraic notation

1 Write these in a simpler way.

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

(b) $3 \times a \times c$

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

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

(a) $5x + 2 = 17$

(b) $A = lw$

(c) $3a - 4b$

(d) $2(x + 1) \equiv 2x + 2$

3 Ana says,

"$2n$ and n^2 mean the same thing."

Explain why Ana is wrong.

4 Which of these are the same as $6x$?

$2 \times 3x$, $x + 6$, $3x + 3x$, $6 + x$, $x \times 6$

Explain how you decide.

5 A rectangle has length $2a$ and width b.

(a) Write an expression for its perimeter.

(b) Write an expression for its area.

(c) Work out the area when $a = 3$ and $b = 5$.

6 The three cards add up to

$9x + 2y$. [$4x$] [?] [$2x + 5y$]

Work out the expression on the missing card.

Mr&Mrs MATHS

1 (a) $4a$

(b) $3ac$

(c) c^3

2 (a) **equation**

(b) **formula**

(c) **expression**

(d) **identity**

3 $2n$ and n^2 are different. Try $n = 5$: $2 \times 5 = 10$, but $5^2 = 25$

Not the same

ANSWERS · REVISION MAT 1

Algebraic notation

4 $2 \times 3x$, $3x + 3x$, $x \times 6$

Each simplifies to $6x$.

5 (a) $4a + 2b$

(b) $2ab$

(c) **30**

6 $9x + 2y - (4x) - (2x + 5y)$

$= 3x - 3y$

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