

SCORE

Algebra

With Classified
answer book

8

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1- Collecting Like Terms

1. Simplify

(i) $c + c + c + c$

(ii) $p \times p \times p \times p$

(iii) $3g + 5g$

(iv) $2r \times 5p$

2. (a) Simplify $5p + 2q - 3p - 3q$

(b) Simplify

(i) $3g - 5g$

(ii) $-2r \times 5m$

3. Simplify

(a) $y^3 + y^3$

(b) $p^2 + p^2 + p^2$

4. Simplify

(a) $c + c + 4c$

(b) $e + f + e + f + e$

(c) $2a + 3a$

(d) $2xy + 3xy - xy$

(e) $3a + 5b - a + 2b + 8$

5. (a) Simplify

$2x \times y \times 3$

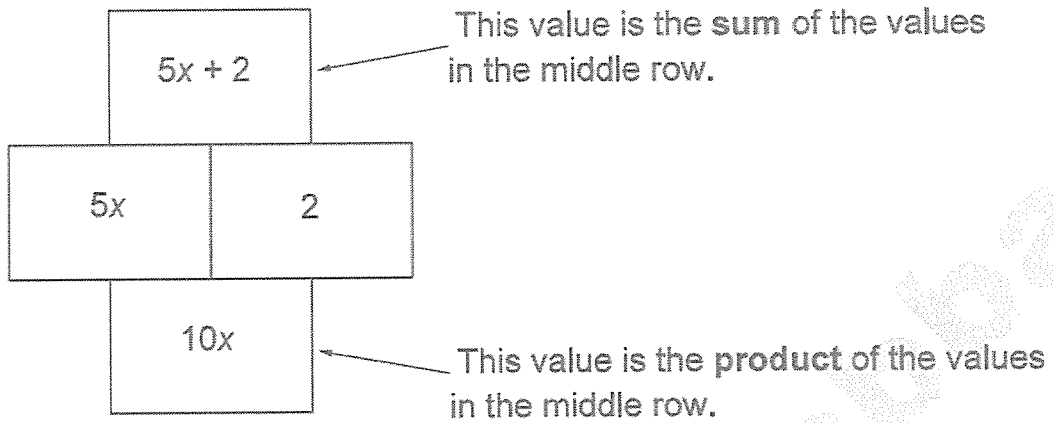
(b) Simplify

$5x + 3y - 2x + y$

(c) Simplify

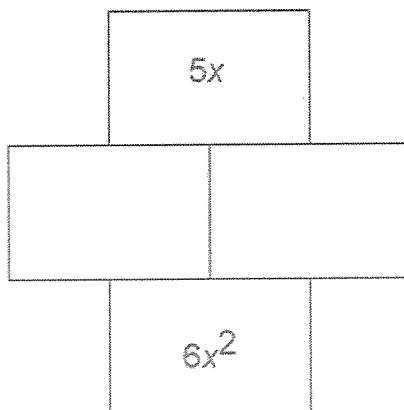
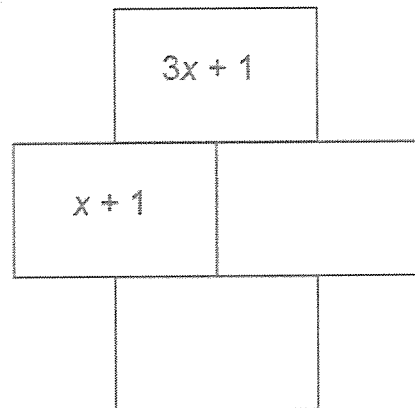
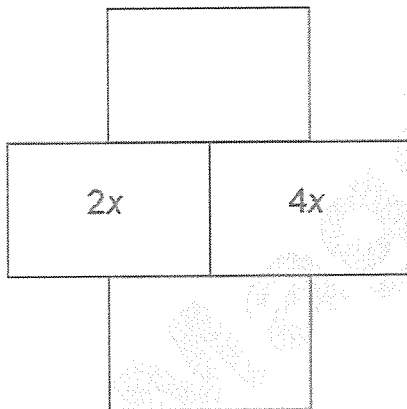
$y + 4y - 9y$

6. Here are the rules for an algebra grid.



Use these rules to complete the algebra grids below.

Write your expressions as simply as possible.



7. Look at the equation in the box.

$$x + (x + 1) + (x + 2) = y$$

Use it to help you write the missing expressions in terms of y

The first one is done for you.

$$5 + \quad x + (x + 1) + (x + 2) = y + 5$$

$$(x + 5) + (x + 6) + (x + 7) = \dots\dots\dots$$

$$2x + 2(x + 1) + 2(x + 2) = \dots\dots\dots$$

$$(x + a) + (x + 1 + a) + (x + 2 + a) = \dots\dots\dots$$

8. (a) Here is an expression.

$$2a + 3 + 2a$$

Which expression below shows it written as simply as possible? Put a ring round the correct one.

$$7a \quad 4a + 3 \quad 7 + a \quad 4(a + 3) \quad 2a + 5$$

(b) Here is a different expression.

$$3b + 4 + 5b - 1$$

Write this expression as simply as possible. _____

9. Write these expressions as simply as possible.

The first one is done for you.

$$n + 1 + 2 \longrightarrow n + 3$$

$$3n + 5n \longrightarrow$$

$$2n + 7 + n + 2 \longrightarrow$$

10. (a) Here is an expression.

$$2a + 7 - 2a$$

Which expression below shows it written as simply as possible? Put a ring round the correct one.

$7a$

7

$4a + 7$

$4a + 7$

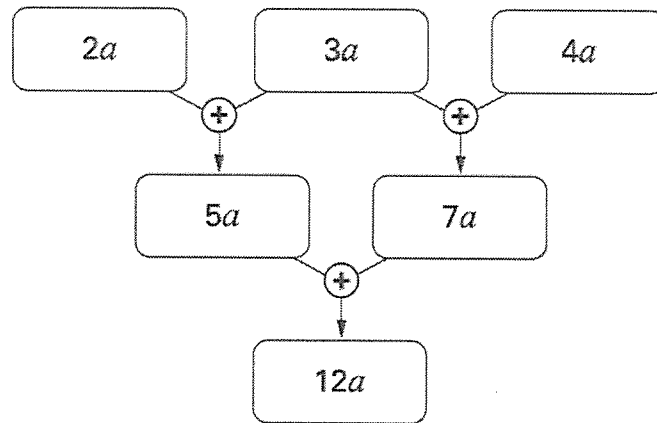
$4(a + 7)$

(b) Here is a different expression.

$$3b + 4 + 5b - 1$$

Write this expression as simply as possible.

11. Look at this algebra grid.



Complete the algebra grids below, simplifying each expression.

