

Name:

Exam Style Questions

Algebraic Notation



Corbettmaths

Equipment needed: Pen

### Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

[www.corbettmaths.com/contents](http://www.corbettmaths.com/contents)

Video 19



Answers and Video Solutions



1. Circle the expression that means 8 more than  $y$



$\frac{y}{8}$

$y - 8$

$8y$

$y + 8$

(1)

2. Circle the expression that is three times larger than  $x$



$3x$

$x + 3$

$x^3$

$3 + x$

(1)

3. Circle the expression that means  $c$  divided by  $d$



$\frac{d}{c}$

$cd$

$\frac{c}{d}$

$c - d$

(1)

4. Circle the expression that can be written as  $w^2$



$2 \times w$

$w \times w$

$\frac{w}{2}$

$w + w$

(1)

5. Match each expression to its definition.



$$a^2$$

2 more than a

$$2 - a$$

a multiplied by a

$$2a$$

2 less than a

$$a + 2$$

a divided by 2

$$\frac{a}{2}$$

a multiplied by 2

$$a - 2$$

a less than 2

(4)

6. Write down an algebraic expression for each of the following.



(a) 4 more than y

$$\frac{y + 4}{\dots\dots\dots} \quad (1)$$

(b) 3 less than p

$$\frac{p - 3}{\dots\dots\dots} \quad (1)$$

(c) 3 multiplied by y

$$\frac{3y}{\dots\dots\dots} \quad (1)$$

(d) 2 divided by a

$$\frac{2}{a}$$

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(1)

(e) p multiplied by m

$$\frac{mp}{\dots\dots\dots} \quad (1)$$

(f) c divided by a

$$\frac{c}{a}$$

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(1)

(g) c taken away from m

$$\frac{m - c}{\dots\dots\dots} \quad (1)$$

7. Explain the meaning of each of these expressions.



(a)  $4y$

4 multiplied by y (1)

(b)  $y^2$

y squared (y multiplied by y) (1)

(c)  $7 - s$

7 subtract s (1)

(d)  $xy$

x multiplied by y (1)

(e)  $b - a$

b subtract a (1)

8. w is 2 less than y



Circle the equation

$$w = \frac{y}{2}$$

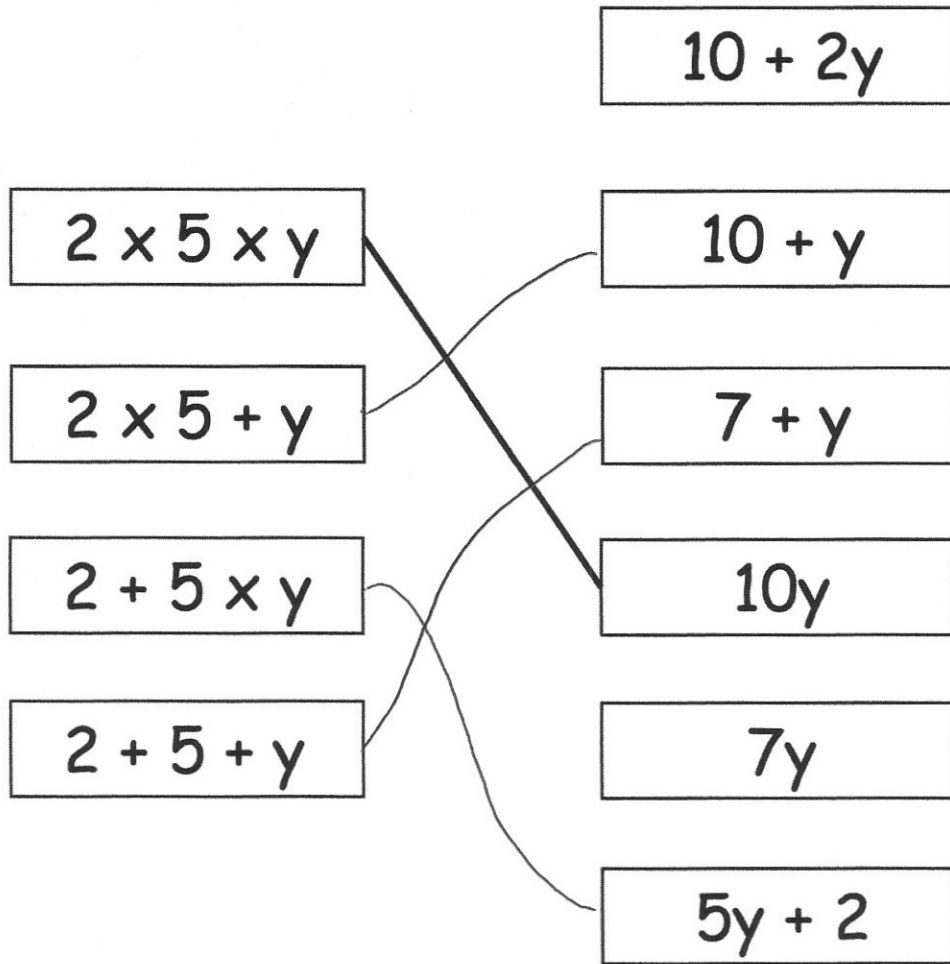
$$w = y - 2$$

$$w = y + 2$$

$$w = 2y$$

(1)

9. Match the expressions.



(3)

10. Lewis has been asked to write an algebraic expression to represent 5 less than the square root of  $x$ .



His answer is  $\sqrt{x - 5}$

Explain his mistake.

The subtract 5 should not be under the square root.  
 $\sqrt{x} - 5$

(1)

11. In a furniture shop, a table comes with six chairs.



Which of the formulae below connects the number of tables,  $T$ , and the number of chairs,  $C$ ?

Formula 1:  $C = T + 6$

Formula 2:  $C = 6T$

Formula 3:  $T = 6C$

Formula 4:  $T = C + 6$

If you multiply the number of tables by 6, you will find the number of chairs

Formula 2

(1)

12. Match each statement to the correct expression.



Multiply  $c$  by 2 then add 1

$c + 2$

$2c + 1$

Square  $c$  then add 1

$2(c + 1)$

Add 1 to  $c$  then multiply by 2

$c^2 + 1$

Square  $c$  then subtract from 1

$c^2 - 1$

$1 - c^2$

(4)