

**1 (a)** Simplify fully  $\frac{9m}{12m}$

**[2 marks]**

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Answer 

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**2 (a)** Lucy wants to simplify  $6a - (7b - 2a)$

She writes  $4a - 7b$

Is she correct?

Tick a box.

☐

Yes

☐

No

Give a reason for your answer.

[1 mark]

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**2 (b)** Lucy also wants to simplify  $3p^2 \times 5p^7$

She says,

“Add 3 and 5, then add 2 and 7”

Her answer is  $8p^9$

Tick a box for each part of her method.

[1 mark]

	Correct	Not correct
Add 3 and 5	<input type="checkbox"/>	<input type="checkbox"/>
Add 2 and 7	<input type="checkbox"/>	<input type="checkbox"/>

**2 (c)** Lucy thinks of a number.

$$10 \times \text{the number} = 10 \div \text{the number}$$

Give a possible value of the number.

**[1 mark]**

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Answer \_\_\_\_\_

**3**

Match each expression on the left with one on the right.  
One has been done for you.

**[3 marks]**

<div><math>a + 3 + 2</math></div>	<div><math>a + 6</math></div>
<div><math>a + 3 \times 2</math></div>	<div><math>a + 5</math></div>
<div><math>a \times 3 \times 2</math></div>	<div><math>3a + 6</math></div>
<div><math>a \times 3 + 2</math></div>	<div><math>6a</math></div>
	<div><math>3a + 2</math></div>

- 4** Simplify  $4 \times 2c$   
Circle your answer.

**[1 mark]**

$42c$

$16c$

$8c$

$6c$

**5 (a)** Simplify fully  $9x + y - 6x + y$

**[2 marks]**

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Answer 

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**5 (b)** Here are two expressions.

$8a$

$a^2 - b$

When  $a = 25$  the expressions have the same value.

Work out the value of  $b$ .

**[3 marks]**

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$b =$  

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**5 (c)** Simplify  $\frac{6w+10}{2}$

Circle your answer.

**[1 mark]**

$6w + 8$

$3w + 10$

$6w + 5$

$3w + 5$

**6 (a)** Simplify fully  $p^2 \times p$

**[1 mark]**

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Answer 

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**6 (b)** Simplify fully  $3a + 5c - a + 6c$

**[2 marks]**

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Answer 

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**7** Simplify fully  $8a + 5b + 6a - 2b$

**[2 marks]**

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Answer 

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8 Emma tries to simplify  $cd \times 2$

Here is her method.

$$\begin{aligned}c \times 2 &= 2c \\d \times 2 &= 2d \\2c \times 2d &= 4cd\end{aligned}$$

What is wrong with her method?

**[1 mark]**

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**9 (a)** Simplify fully  $d \times d$

**[1 mark]**

Answer \_\_\_\_\_

**9 (b)** Simplify fully  $n \div n$

**[1 mark]**

Answer \_\_\_\_\_

**9 (c)** Simplify fully  $\frac{1}{3} \times 6t$

**[1 mark]**

Answer \_\_\_\_\_

**10 (a)** Simplify fully  $x + 4x$

**[1 mark]**

Answer \_\_\_\_\_

**10 (b)** Simplify fully  $5 \times 2w$

**[1 mark]**

Answer \_\_\_\_\_

**10 (c)** Simplify fully  $2m \div m$

**[1 mark]**

Answer \_\_\_\_\_

**10 (d)** Simplify fully  $y \times y \times y$

**[1 mark]**

Answer \_\_\_\_\_