



# Timester Challenge

## Working with Algebra



Simplify  $3a + 5b + 8a - 2b$

Bronze ★

Expand  $4(x - 7)$

Silver ★

Write this expression in it's simplest factorised form.

$$4(7x + 12) - 2(5x - 3)$$

Substitute  $a = 4$  and  $b = -2$  into  $6a + 7b$ .

Bronze ★

Factorise  $24x + 32$

Silver ★

Gold ★



# Timester Challenge

Working with Algebra



## Answers

Simplify  $3a + 5b + 8a - 2b$

$$11a + 3b$$

Bronze 

Expand  $4(x - 7)$

$$= 4x - 28$$

Silver 

Write this expression in its simplest factorised form.

$$4(7x + 12) - 2(5x - 3)$$

$$= 28x + 48 - 10x + 6$$

$$= 18x + 54$$

$$= 9(2x + 6)$$

$$= 18(x + 3)$$

Gold 

Substitute  $a = 4$  and  $b = -2$   
into  $6a + 7b$ .

$$= 6 \times 4 + 7 \times -2$$

$$= 24 - 14$$

$$= 10$$

Bronze 

Factorise  $24x + 32$

$$= 8(3x + 4)$$

Silver 