



## Expanding and Factorising Exam Practice

Q1. a) Factorise:  $4x^2 + 8x$

Answer: \_\_\_\_\_  
(2 marks)

b) Expand :  $3(2x + 5)$

Answer: \_\_\_\_\_  
(2 marks)

Q2. a) Factorise:  $12x^2y - 18xy^4$

Answer: \_\_\_\_\_  
(2 marks)

b) Expand:  $-8(3x + 4)$

Answer: \_\_\_\_\_  
(2 marks)



Q3. a) Factorise  $2a^2 - a$

Answer: \_\_\_\_\_  
(2 marks)

b) Expand and simplify  $20 + 2b(4 - 8b) - 3$

Answer: \_\_\_\_\_  
(2 marks)

Q4. a) Expand and simplify  $4(5c - 2) + 3(5c + 2)$

Answer: \_\_\_\_\_  
(2 marks)

b) Factorise:  $y(x + 4) + z(x + 4)$

Answer: \_\_\_\_\_  
(2 marks)



Q5. a) Expand and simplify  $9(4a + 5) - 2(8a - 3)$

Answer: \_\_\_\_\_  
(2 marks)

b) Factorise:  $200d - 850cd$

Answer: \_\_\_\_\_  
(2 marks)

Q6. a) Simplify  $10x \times 3x + 6x(x + 4)$

Answer: \_\_\_\_\_  
(2 marks)

b) Factorise:  $20c - 72d + 32e$

Answer: \_\_\_\_\_  
(2 marks)



Q7. a) Expand  $(4 + 3x) \times 2$

Answer: \_\_\_\_\_  
(2 marks)

b) Factorise:  $4c^2d - cde$

Answer: \_\_\_\_\_  
(2 marks)

Q8. a) Expand and simplify  $7x(2x - 3) + (3x)^2$

Answer: \_\_\_\_\_  
(3 marks)

b) Simplify  $2x(x - 9) + 5(x - 9)$

Answer: \_\_\_\_\_  
(2 marks)



## Applied Mixed Practice Problems

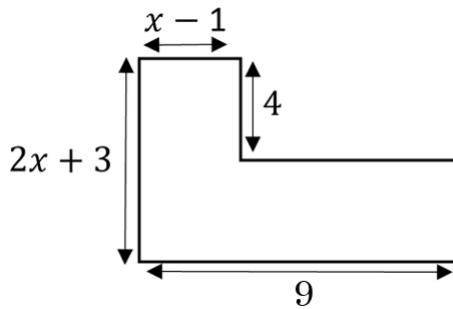
Q9. Let  $a, b$  be non-zero numbers. Fill in the table.

Factorised form	Expanded form
	$c^8a^4t^6 - c^6a^4t^8$
$-4b(2ab - c + 5)$	
	$(b - a)x + (b - a)y$

Answer: \_\_\_\_\_  
(3 marks)



Q10. The plan view of a living room, shown below, has area  $42 \text{ m}^2$ .



- a) Find a fully simplified expression for the area of the living room.

Answer: \_\_\_\_\_  
(3 marks)

- b) Hence find the length of the shortest wall in the living room.

Answer: \_\_\_\_\_  
(2 marks)