



ACHIEVE ACADEMY

GCSE Maths — Foundation Tier

Expressions, Substitution & Simplifying · Practice Booklet

NAME: _____

CLASS: _____

DATE: _____

☐ Developing

☒ Secure

☐ Greater Depth

Answer every question in the working space provided. Method marks are available for correct working even if the final answer is wrong. Check the time allowed with your tutor before you start.

Expressions, Substitution & Simplifying

Total marks available: 70

● Expressions, Substitution & Simplifying

Q1

[2 marks]

Find the value of $3a + 2$ when $a = -4$.

Q2

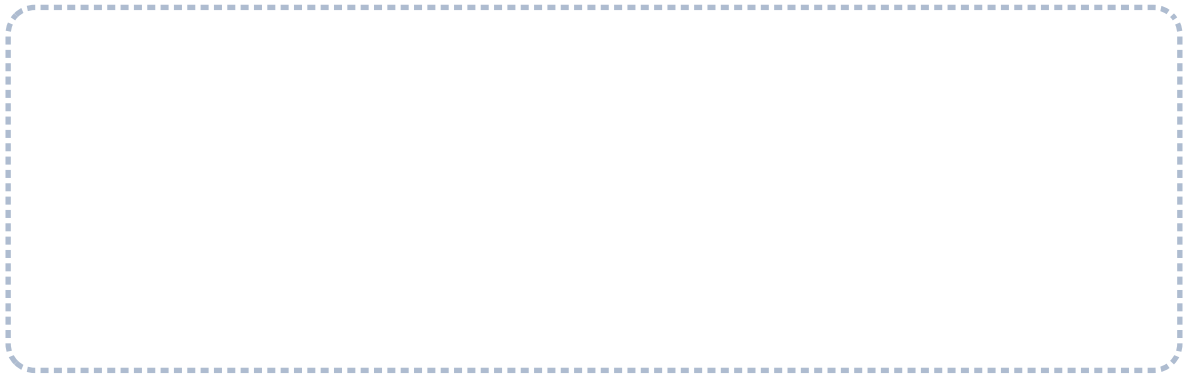
[2 marks]

Simplify $a - 7a - 8a + 4a$.

Q3

[2 marks]

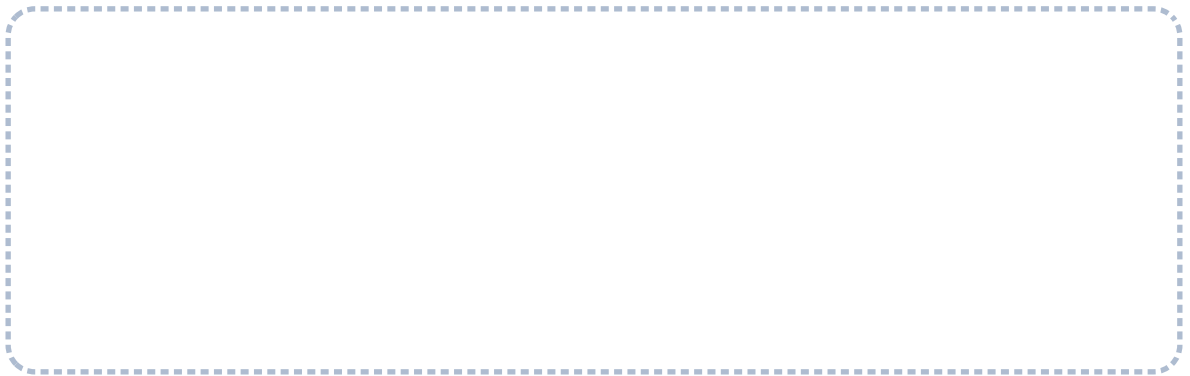
Find the value of $2b + 8$ when $b = -5$.



Q4

[2 marks]

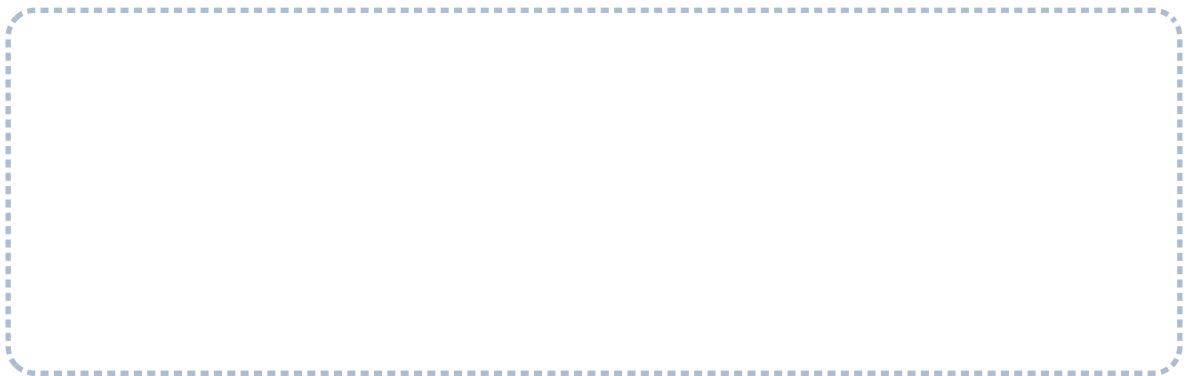
Find the value of $-x$ when $x = -8$.



Q5

[2 marks]

Find the value of $3y - 8$ when $y = -7$.



Q6

[2 marks]

Simplify $-3b + 6b + 8b + 8b$.

Q7

[2 marks]

Simplify $5x - 5x - 3x + x$.

Q8

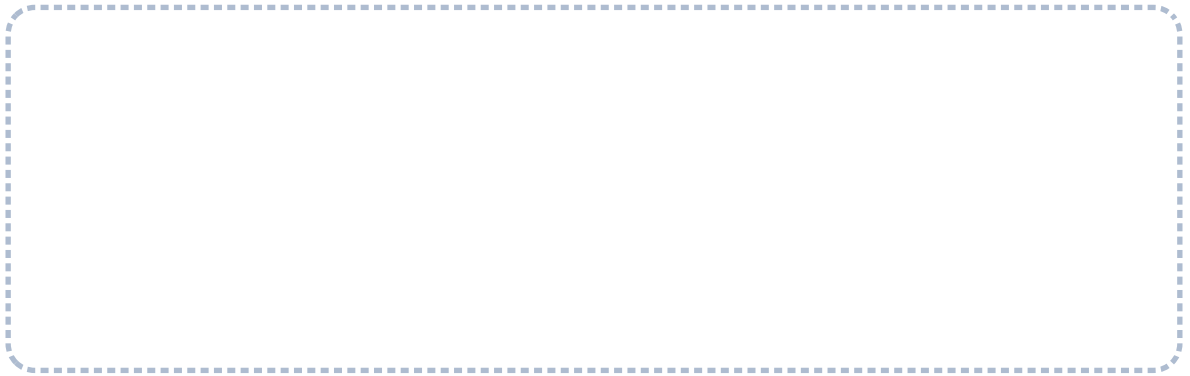
[2 marks]

Simplify $-4b + b - 6b + 2b$.

Q9

[2 marks]

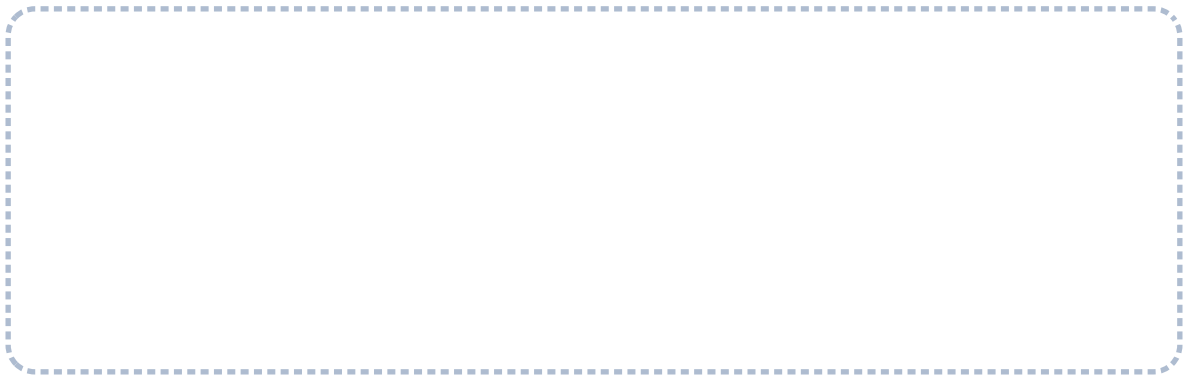
Find the value of $-3x - 6$ when $x = 4$.



Q10

[2 marks]

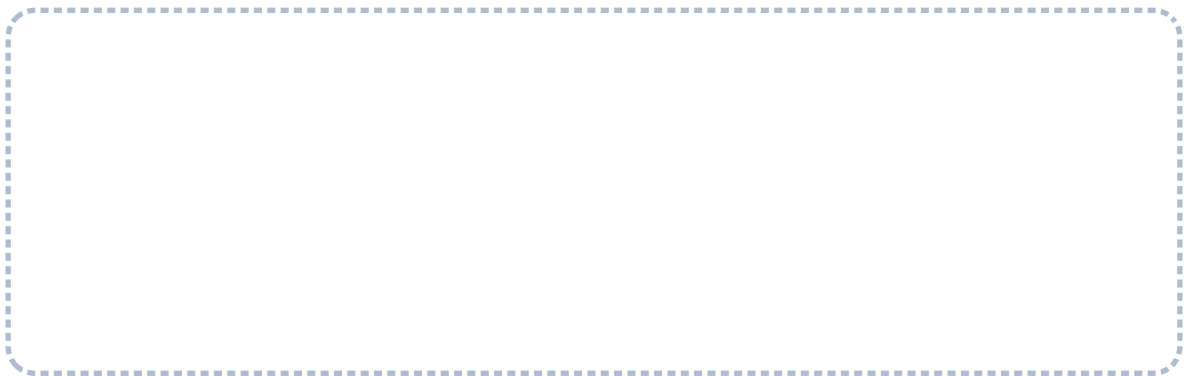
Find the value of $3n + 6$ when $n = -1$.



Q11

[2 marks]

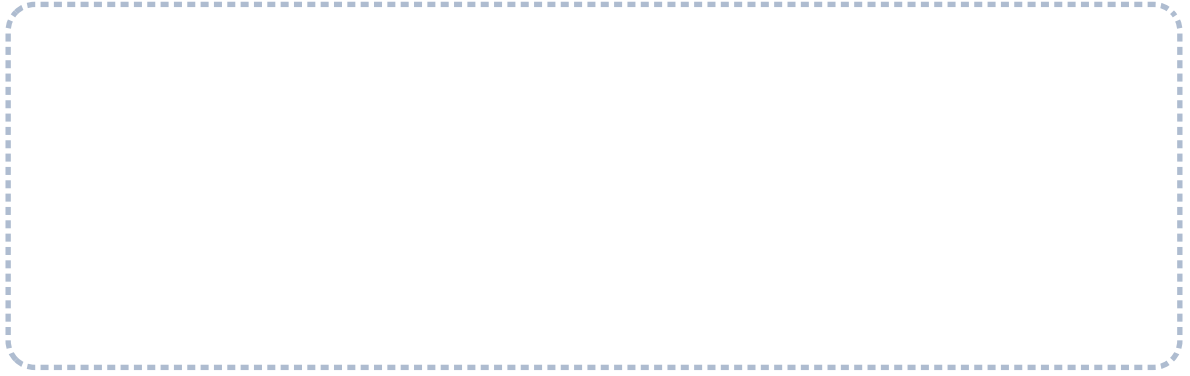
Factorise $14x - 35$ completely.



Q12

[2 marks]

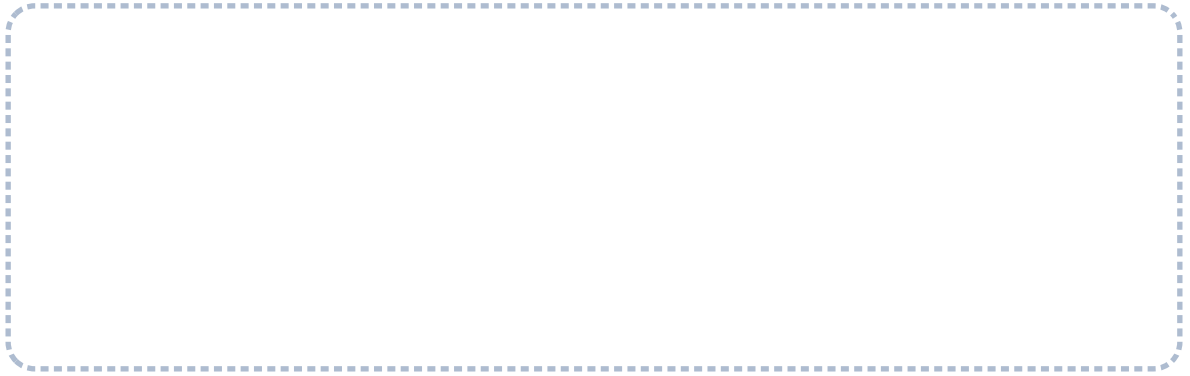
Factorise $18x + 36$ completely.



Q13

[2 marks]

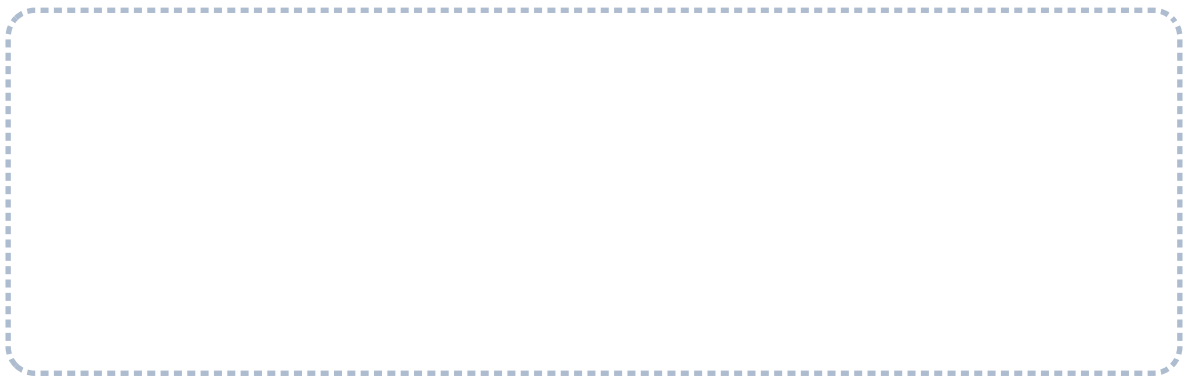
Expand $4(-6y + 1)$.



Q14

[2 marks]

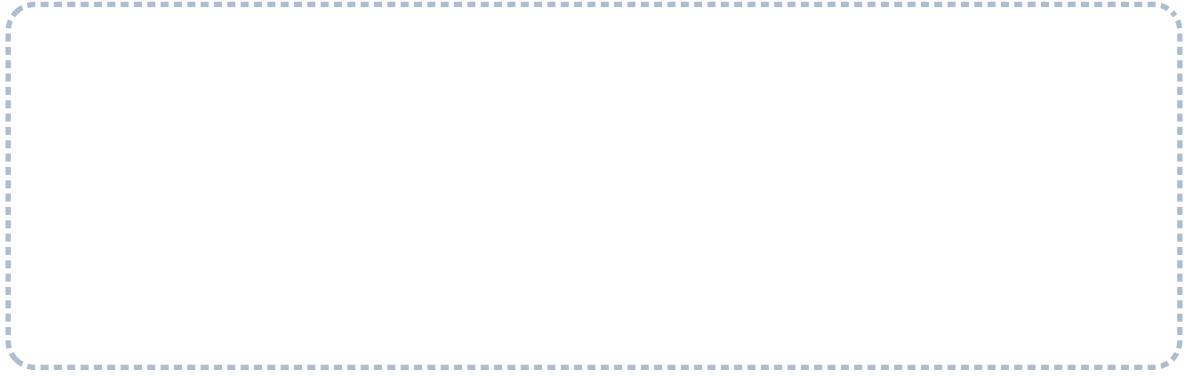
Factorise $42n + 48$ completely.



Q15

[2 marks]

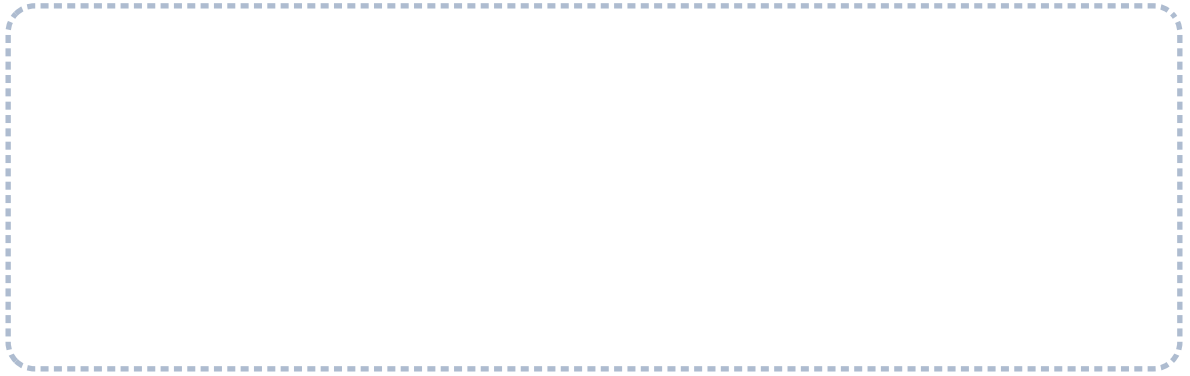
Expand $5(-6b + 6)$.



Q16

[2 marks]

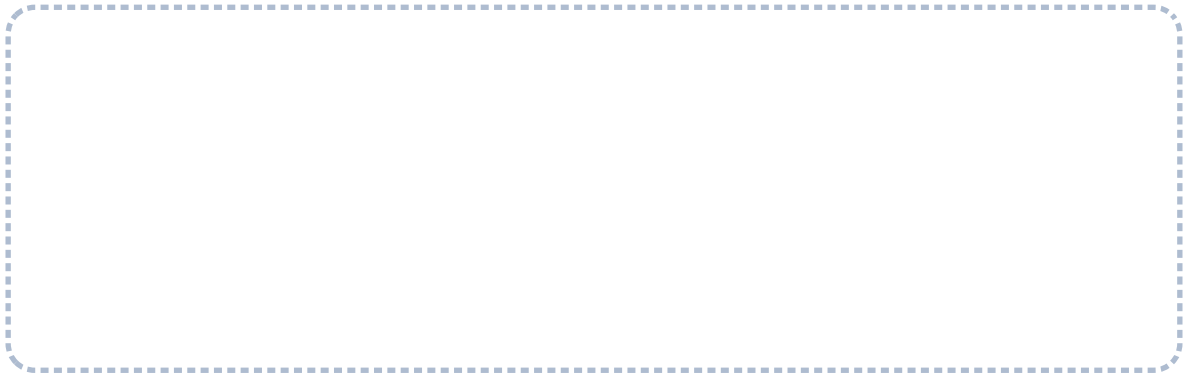
Expand $6(5y + 1)$.



Q17

[2 marks]

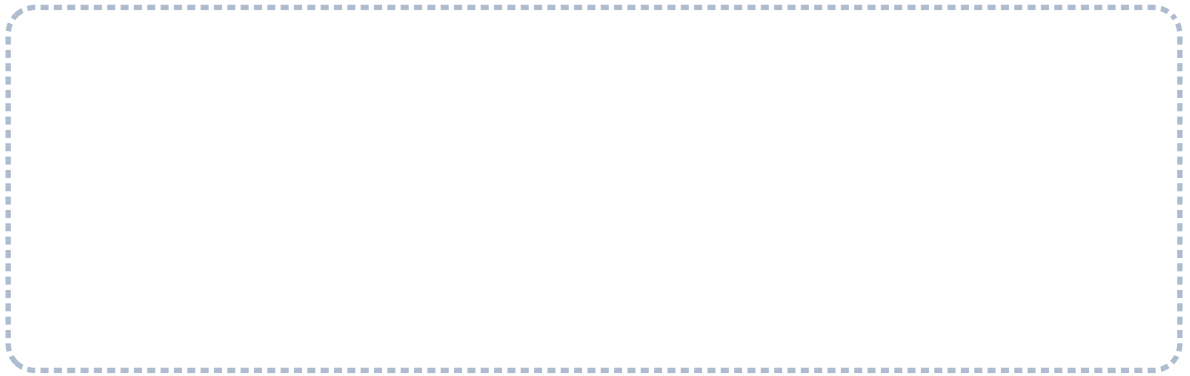
Expand $6(7x - 5)$.



Q18

[2 marks]

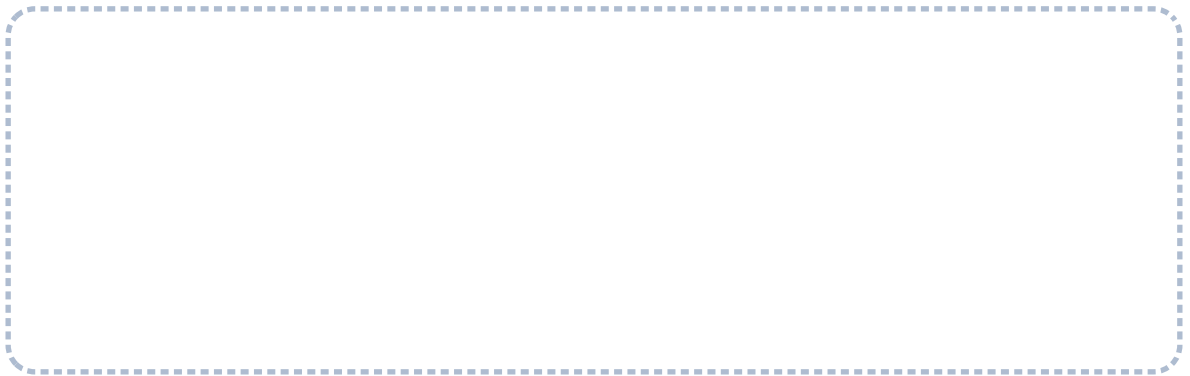
Expand $8(5y - 5)$.



Q19

[2 marks]

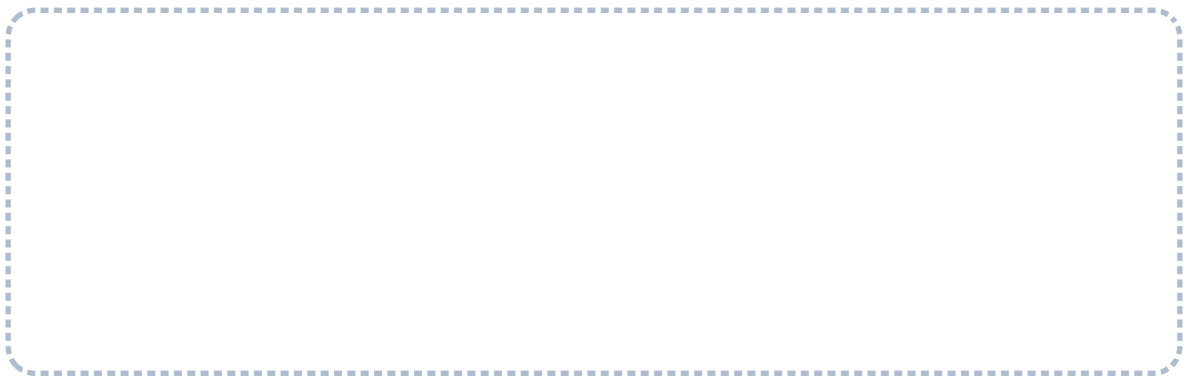
Expand $6(8x + 9)$.



Q20

[2 marks]

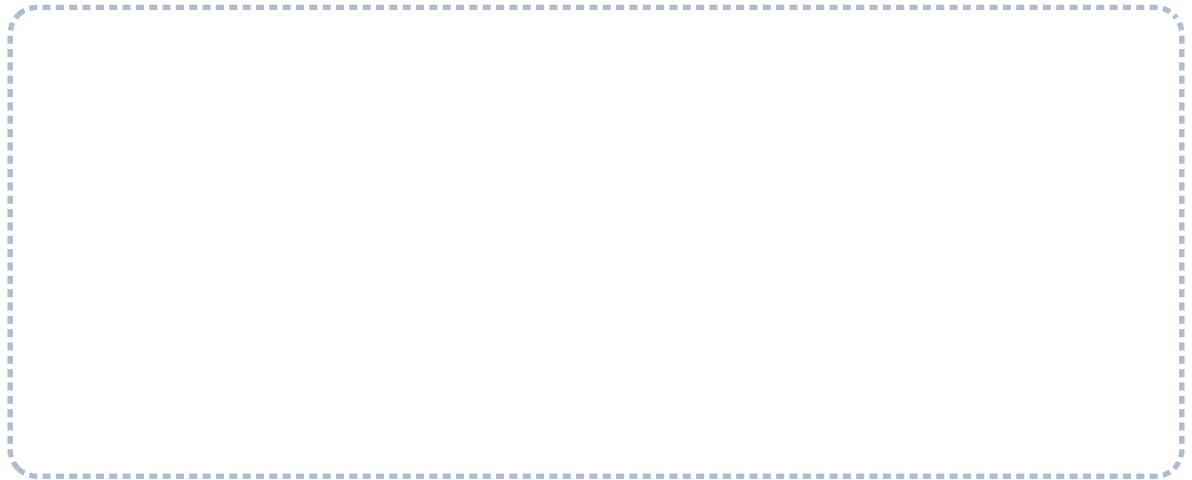
Factorise $10x - 14$ completely.



Q21

[3 marks]

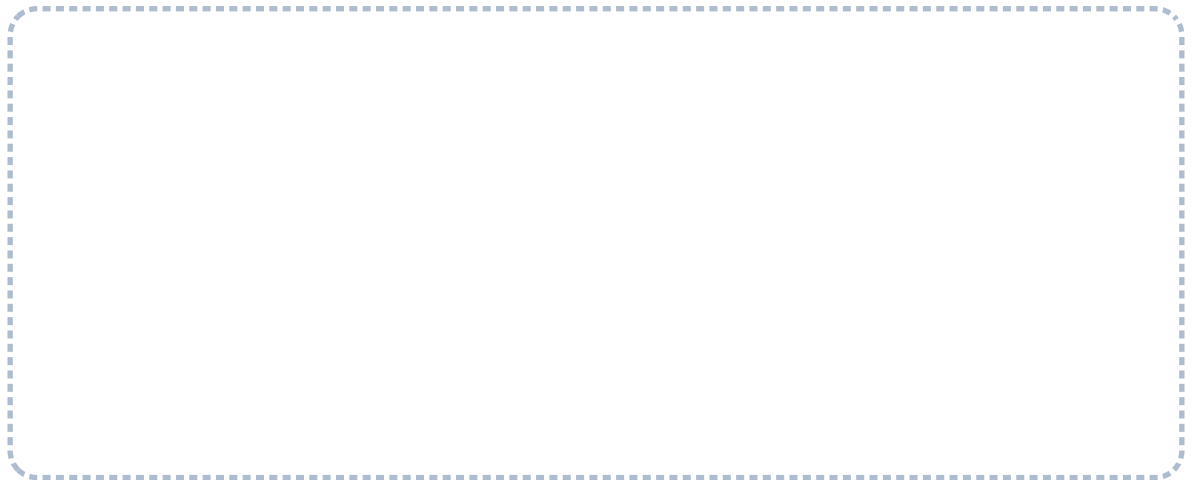
Expand and simplify $(x + 1)(x - 1)$.



Q22

[3 marks]

Expand and simplify $(a - 6)(a + 9)$.



Q23

[3 marks]

Find the value of $2y^2 + 2y$ when $y = 5$.

Q24

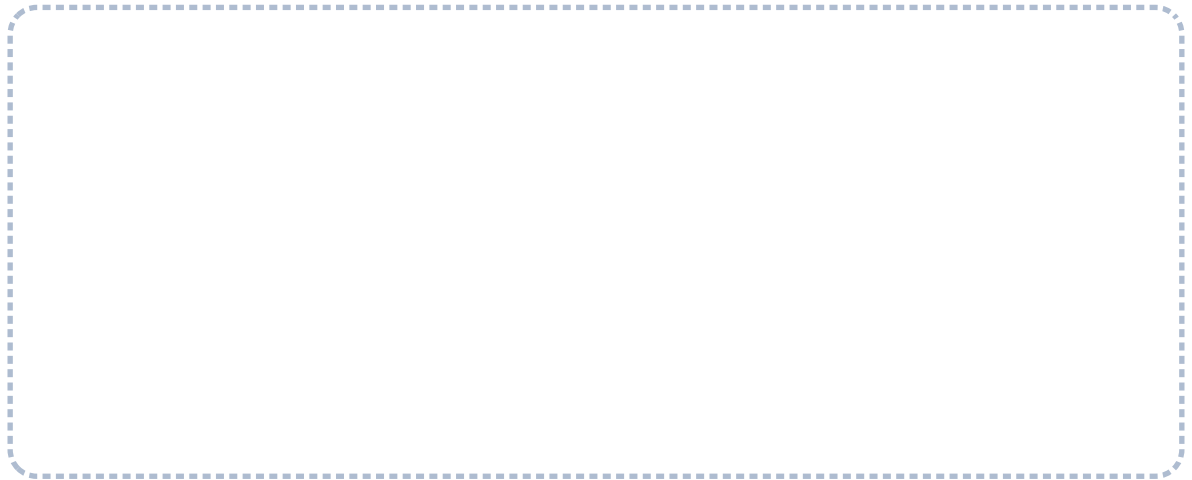
[3 marks]

Expand and simplify $(a + 9)(a - 1)$.

Q25

[3 marks]

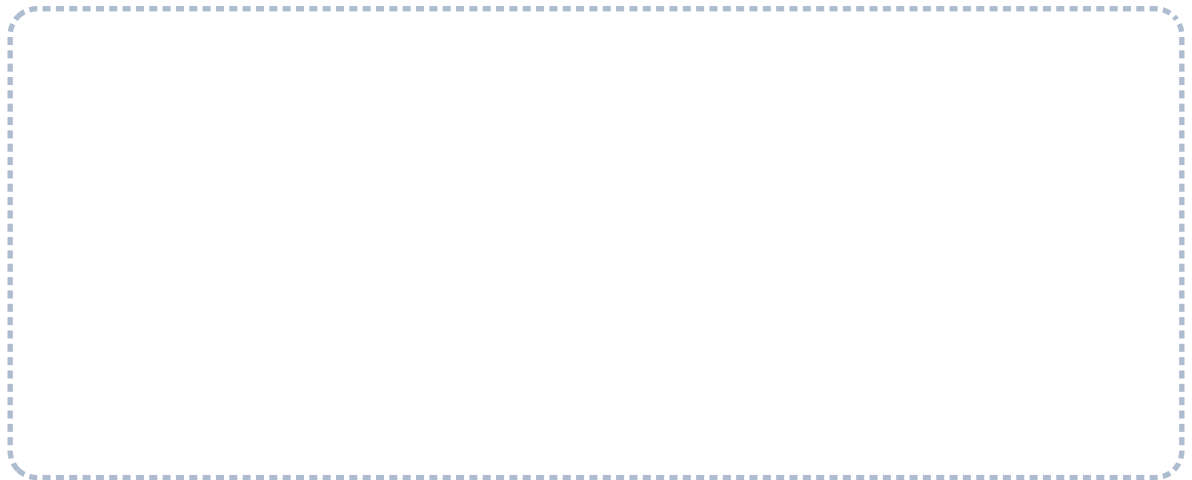
Expand and simplify $(b + 3)(b - 5)$.



Q26

[3 marks]

Expand and simplify $(n + 1)(n + 4)$.



Q27

[3 marks]

Find the value of $3y^2 + 4y$ when $y = 5$.

Q28

[3 marks]

Find the value of $3b^2 + 5b$ when $b = -2$.

Q29

[3 marks]

Expand and simplify $(n - 7)(n + 6)$.

Q30

[3 marks]

Find the value of $-a^2 - 3a$ when $a = 5$.