

**Student Name:** \_\_\_\_\_**Class:** \_\_\_\_\_**Student ID:** \_\_\_\_\_**Date:** {{DATE}}**Assessment Details**

<b>Duration:</b> 45 minutes	<b>Total Marks:</b> 100
<b>Topics Covered:</b>	<ul style="list-style-type: none"><li>• Basic Algebraic Concepts</li><li>• Application of Mathematical Operations</li><li>• Solving Linear Equations</li></ul>

**Instructions to Students:**

1. Read all questions carefully before attempting.
2. Show all working out - marks are awarded for method.
3. Calculator use is permitted except where stated otherwise.
4. Write your answers in the spaces provided.
5. If you need more space, use the additional pages at the end.
6. Time management is crucial - allocate approximately 1 minute per mark.

Section A: Multiple Choice [20 marks]

Question 1

[2 marks]

Simplify the expression:  $2x + 5 - 3x$

A)  $-x + 5$

B)  $x + 5$

C)  $-x - 5$

D)  $x - 5$

Question 2

[2 marks]

Solve the equation:  $x + 2 = 7$

A)  $x = 5$

B)  $x = 9$

C)  $x = 3$

D)  $x = 1$

Question 3

[2 marks]

Graph the equation:  $y = 2x - 1$

A) Line with a positive slope

B) Line with a negative slope

C) Horizontal line

D) Vertical line

Question 4

[2 marks]

Simplify the expression:  $3(2x - 1)$

A)  $6x - 3$

B)  $6x + 3$

C)  $5x - 2$

D)  $5x + 2$

Question 5

[2 marks]

Solve the equation:  $2x - 3 = 11$

A)  $x = 7$

B)  $x = 5$

C)  $x = 3$

D)  $x = 1$

Section B: Short Answer Questions [40 marks]

Question 6

[8 marks]

Solve the equation:  $2x + 5 = 11$

Question 7

[8 marks]

Simplify the expression:  $3x - 2 + 2x$

Question 8

[8 marks]

Identify the slope of the equation:  $y = 2x - 1$

Question 9

[8 marks]

Solve the equation:  $x - 3 = 7$

Simplify the expression:  $x + 2 + x - 1$

**Question 11**

**[40 marks]**

Solve the equation:  $2x + 3 = 9$  and explain your reasoning. Use algebraic concepts to model a real-world problem.



