## **Edexcel GCSE Mathematics Non-Calculator 2024 Higher Paper 1 Revision Worksheet**

## Answer all questions. Show all your working clearly. Calculators are NOT allowed.

## **Problem Solving and Exercises**

1. Solve for x: 
$$3(x-2) = 2x + 7$$

2. Expand and simplify 
$$(2x-3)(x+5)$$

3.

3. A rectangle has a length of 3x + 2 cm and a width of x - 4 cm. Express the area of the rectangle as a simplified expression in terms of x.

4. Simplify: 
$$\frac{4x^2-9}{2x+3}$$

5. Calculate the value of 
$$k$$
 if  $2k + 5 = 3k - 8$ .

6. The nth term of a sequence is 4n - 7. Find the 10th term.

7. Factorise completely: 
$$x^2 - 9x$$

8. Solve the inequality: 
$$5 - 2x > 1$$

9. The mean of five numbers is 12. Four of the numbers are 8, 11, 13, and 17. Find the fifth number.

10. Work out 
$$7^2 - 4^3$$
.

11. The probability of winning a game is 0.35. What is the probability of not winning?

12. A triangle has sides of length 5 cm, 12 cm, and 13 cm. Is this triangle right-angled? Show your working.

13. Write 0.0045 in standard form.

14. Solve: 
$$\frac{2}{x} = 8$$

15. The ratio of boys to girls in a class is 5:7. If there are 24 girls, how many boys are there?