Instructions
- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

Question 1

[3 marks]

CLO1, C1
Write the interval notation for
(a) $x \geq -5$
(b) $-4 < x \leq 3$
(c) $x < 1$

Question 2

[3 marks]

CLO1, C2
Represent the following interval notation on a number line.
$$x \leq 3 \text{ or } x > 6$$

Question 3

[4 marks]

CLO1, C3
(a) Solve the inequality of $8x + 8 \geq -64$ and $-7 - 8x \geq -79$.
(b) Represent the solution on the number line.
(c) Write the solution with interval notation.