I. Linear Inequality in One Variable:

\[ ax + b \geq c \]  
( general form )

where \( a, b \) and \( c \) are constants (\(<, \leq, >, \geq\) are also possible)

\[ \text{e.g., } 2x + 5 < 13 \quad (a = 2, b = 5, c = 13) \]

II. Method for Solving (p.256):

Manipulate (+, -, \( \times \) and/or \( \div \)) the inequality as if it were an equation in order to isolate the variable on one side; \textbf{EXCEPT} — REVERSE the inequality SIGN whenever \textbf{MULTIPLYING (or DIVIDING) by a NEGATIVE \#}

\[ \text{e.g., } 2x + 5 < 13 \]
\[ 2x < 8 \text{ after subtracting 5} \]
\[ x < 4 \text{ after dividing by 2} \]

Note: the solution is ALL numbers less than 4 (\textit{i.e.}, an infinite set of numbers)
III. Examples (p.262): Exercises #14, 20, 30, 38

HW: p.262 / Exercises #3, 13, 15, 17, 19, 25, 33
Read pp.266-271 (section 4.2)