Use your calculator to graph and solve the inequality

1. $x^2 + 2x - 3 > 0$

2. $x^2 - 7x - 8 \leq 0$

Solve the equation by graphing by hand

3. $|x + 3| = \frac{1}{2}x + 3$

4. Solve the system by hand

$6x - y + 3z = -9$

$5x + 5y - 5z = 20$

$3x - y + 4z = -5$

4. a) Graph the piecewise function
   b) State the domain and range
   c) Give any increasing, decreasing or constant intervals

$$f(x) = \begin{cases} -3, & -5 \leq x < -2 \\ x + 1 & -2 < x > 2 \\ -x + 2 & 2 \leq x < 5 \end{cases}$$