Read each problem **very carefully** before starting to solve it and do only what is asked. Each problem is worth around 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. [4 points] Solve the system and give your solutions in point form.

$$\left\{ \begin{array}{rcl} (x-2)^2 + y^2 & = & 8 \\ x+y & = & 2 \end{array} \right\}$$

2. [6 points] Decompose into partial fractions $\frac{5}{(x+1)(x^2+4)}$.