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.

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

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