Name:

| Score |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2 | 3 | 5 | 10 |
|  | P1 | P2 | P3 | Q1 |

P1. Complete the following definitions.
(a) A function is even if...
(b) A function is odd if...

P2. Describe the set as a union of finite or infinite intervals.

$$
\left\{x \in \mathbb{R}: 2\left|x^{2}-x\right| \geq 3\right\}
$$

P3. Find the composite function $f \circ g$ and determine its domain.

$$
f(x)=\frac{1}{x^{4}-x^{2}-1} \quad \text { and } \quad g(x)=\sqrt{x+1}
$$

