Find all stationary points for each function and use the second derivative (if possible) to classify each as a minimum, a maximum, or neither. If the second derivative can not be used, then use any method you choose.

1. 
$$f(x) = x^4 - 4$$

2. 
$$f(x) = x^3 + 1$$

3. 
$$f(x) = -2x^2 + 7x - 1$$

4. 
$$f(x) = x^2 - x + 2$$

5. 
$$f(x) = 4x^3 - 15x^2 - 18x + 2$$

6. 
$$f(x) = \frac{4x^2+9}{x}$$