Analyzing Graphs WS 2 Name _____

Sketch the graph of the polynomial function described or explain why no such function can exist.

1. Cubic function with two distinct negative zeros, one positive zero, and a positive y-intercept.

2. Cubic function with a negative double zero, a positive zero, and a negative leading coefficient.

3. Cubic function with one real zero, two complex zeros, and a positive leading coefficient.

4. Cubic function with no real zeros.

5. Quartic function with no real zeros.

6. Quartic function with two distinct positive zeros, two distinct negative zeros, and a negative y-intercept.

7. Quartic function with two double zeros.

8. Quartic function with two distinct real zeros and two complex zeros.

9. Quartic function with five distinct real zeros.

10. Quintic function with five distinct real zeros.