

1. State the degree and the zeros of the following function. Then state the multiplicity of each zero and whether the graph crosses the x-axis. Use all of this info to sketch the graph.

$$f(x) = (x-1)^3(x+3)^4$$

2. State the degree and the zeros of the following function. Then state the multiplicity of each zero and whether the graph crosses the x-axis. Use all of this info to sketch the graph.

$$f(x) = (x-1)(x-2)^2(x-4)^3$$

3. State the degree and the zeros of the following function. Then state the multiplicity of each zero and whether the graph crosses the x-axis. Use all of this info to sketch the graph.

$$f(x) = (x-1)(x-2)^2(x-4)^3$$