Practice Activity: Graphing a polynomial function given the key features

Complete the question below, using your notebook and/or online graphing app.

1. Assume that a graph has a degree 4, a positive leading coefficient and x-intercepts at -4, -2, 0,3. What will the end behaviours of this graph be?

2. Sketch the function based on the end behaviours and the x-intercepts by completing the following:

   a) Plot the x-intercepts on a graph (Step 1)

   b) Draw in the end behaviours (Step 2)

   c) Connect the other x-intercepts by alternative curves of ∩ and ∪ shapes (Step 3)

When finished, you can refer to the "Suggested Answers For Graphing a Polynomial Function given the key features" to check your work.