1. Divide the following polynomials.
   a) \((6x^3 - 19x^2 + 16x - 4) \div (x - 2)\)
   b) \((x^3 - 1) \div (x - 1)\)
   c) \((-5x^2 - 2 + 3x + 2x^4 + 4x^3) \div (2x^2 + 1)\)
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2. Find ALL the zeros for each given function.
   a) \( f(x) = 2x^3 + 3x^2 - 8x + 3 \)
   
   b) \( f(x) = 10x^3 - 15x^2 - 16x + 12 \)
3. Sketch the graph of the given polynomial functions
   a) \( f(x) = x^3 + 3x^2 - 4x - 12 \)

Find the following:
   • Domain:
   • \( x \)-intercept(s):
   • \( y \)-intercept(s):
   • Intervals where \( f(x) \) is positive or negative
b) \( f(x) = 16x^2 - 4 \)

Find the following:

- Domain:

- \( x \)-intercept(s):

- \( y \)-intercept(s):

- Intervals where \( f(x) \) is positive or negative