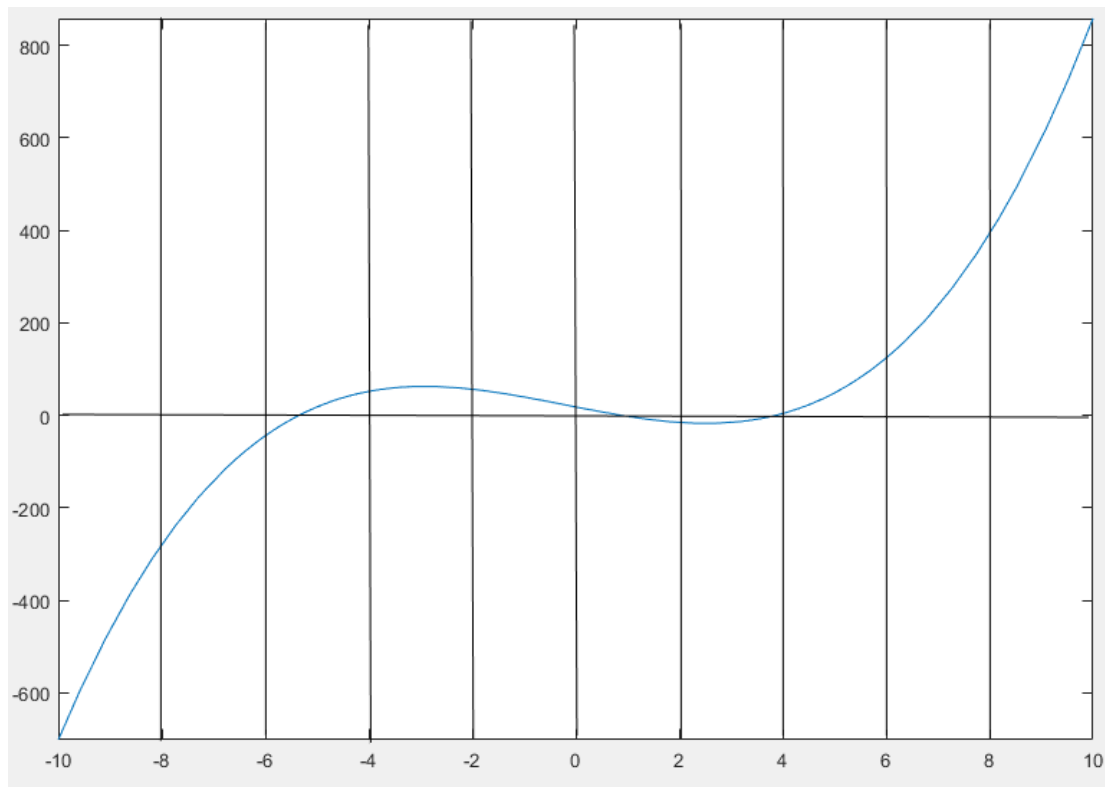


Find **all** the roots of the equation  $x^3 + 0.6x^2 - 22x + 18 = 0$  using the **bisection method** from example 2-1. Use the following algorithm:

- (1) Use fplot to find the possible solution domain of [a, b]
- (2) Divide the domain [a, b] into 20 equally spaced interval  $h = (b-a)/20$
- (3) Check for a sign change at the endpoints of each interval
- (4) If a sign change is identified in a subinterval, use the bisection method in that subinterval for determining the root.
- (5) Display the results



Your final result in the output should be like this:

| iteration | a         | b         | xNs              | f(xNs)   | Tolerance |
|-----------|-----------|-----------|------------------|----------|-----------|
| 10        | -5.345703 | -5.343750 | <b>-5.344727</b> | 0.045641 | 0.000977  |
| 10        | 0.867188  | 0.869141  | <b>0.868164</b>  | 0.006959 | 0.000977  |
| 10        | 3.876953  | 3.878906  | <b>3.877930</b>  | 0.026170 | 0.000977  |