Graphing & Solving Polynomials Notes

Objective: To sketch a graph of any polynomial with any degree higher than 1.

Directions:

a) Use the Leading Coefficient Test to determine the polynomial function's end behavior.

b) Find the x-intercepts by setting the function =0 and factoring.

c) Determine each solution's multiplicity and state if it touches the x-axis and turns around or crosses the x-axis.

d) Determine the y-intercept of each polynomial function.

e) Sketch the graph of each polynomial function.

Ex1) $f(x)=x^3-5x^2-4x+20$

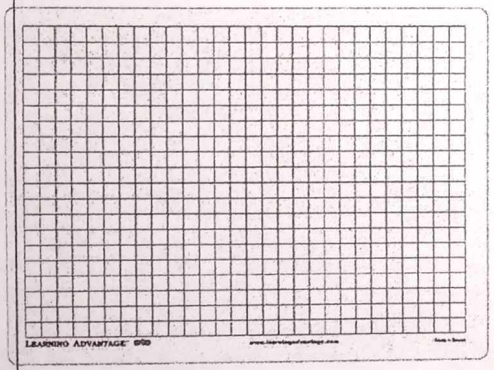
a)_____

b)_____

c)_____ _____

d)_____

e)



Ex2) $f(x)=-x^4+16x^2$

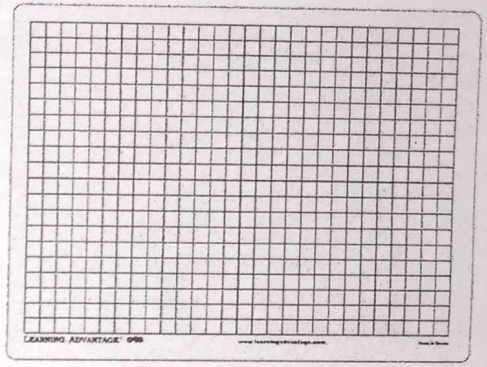
a)_____

b)_____

c)_____

d)_____

e)



Ex3) $f(x)=x^3+4x^2+4x$

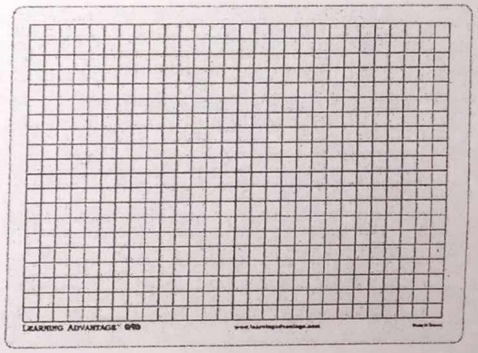
a)_____

b)_____

c)_____

d)_____

e)



Ex4) $f(x) = 3x^2 - x^3$

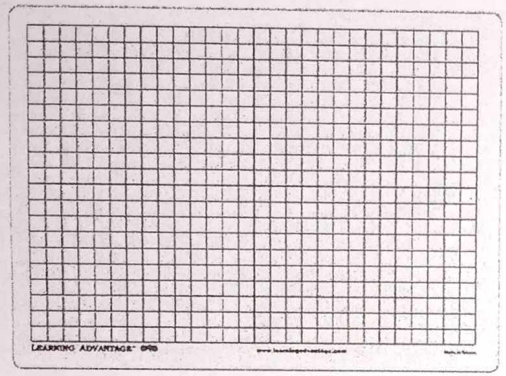
a)_____

b)_____

c)_____

d)_____

e)



Ex5) $f(x) = -x^4 + 16x^2$

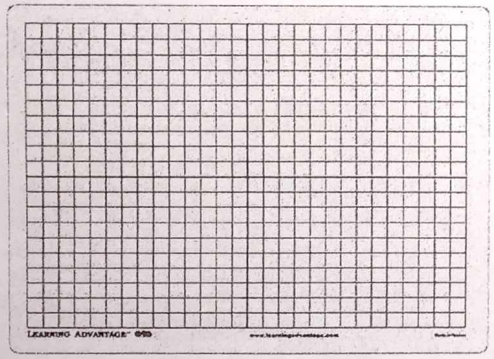
a)_____

b)_____

c)_____

d)_____

e)

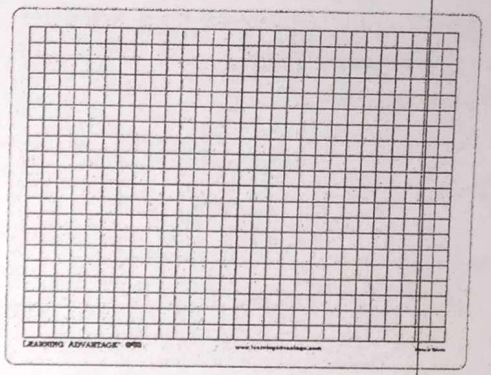


Ex6) $f(x) = -2x^4 + 2x^3$

a)_____

b)_____

c)_____

d)_____

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