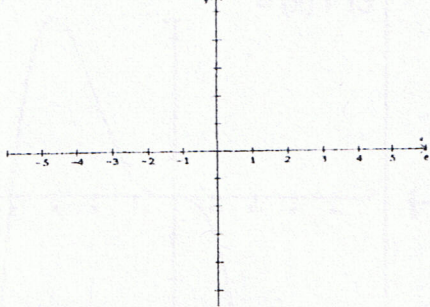


1.7.1: What Role Do Factors Play?

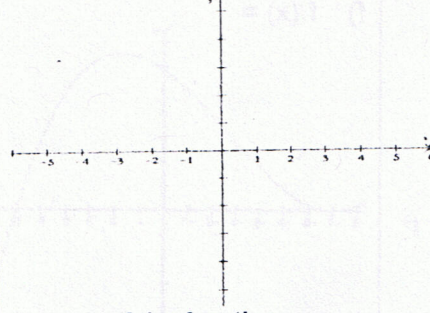
1. Use technology (graphing calculator, software, GSP_Gr12_U1D7) to determine the graph of each polynomial function. Sketch the graph, clearly identifying the x-intercepts.

a) $f(x) = (x - 2)(x + 1)$



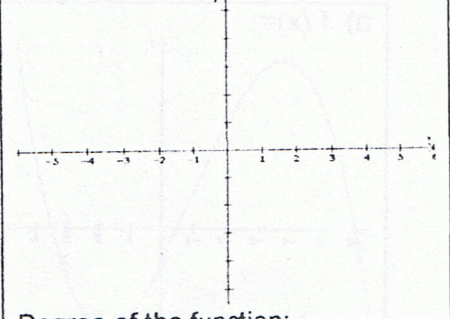
Degree of the function: _____
x-intercepts: _____

b) $f(x) = (x - 2)(x + 1)(x + 3)$



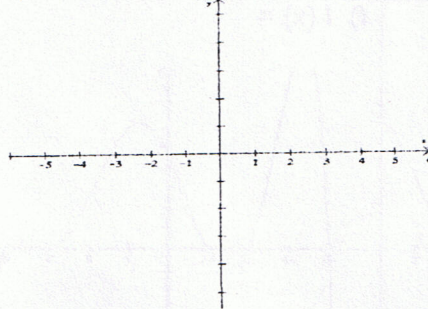
Degree of the function: _____
x-intercepts: _____

c) $f(x) = -(x - 2)(x + 1)(x + 3)$



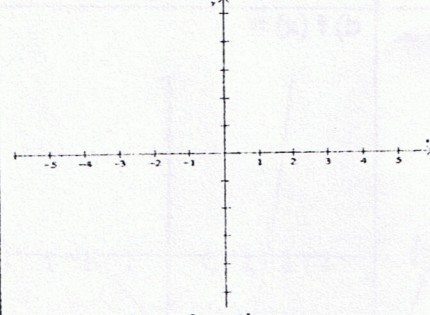
Degree of the function: _____
x-intercepts: _____

c) $f(x) = x(x+1)^2 = x(x+1)(x+1)$



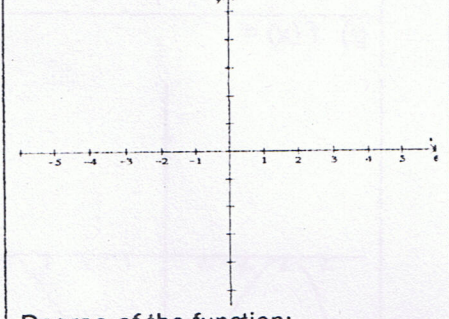
Degree of the function: _____
x-intercepts: _____

d) $f(x) = (x - 2)^2(x + 2)^2$



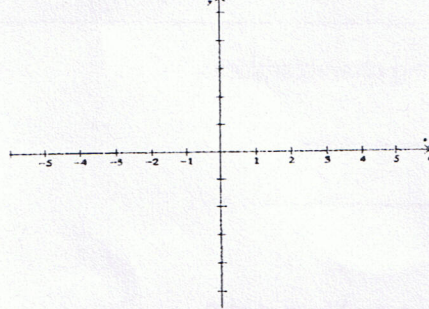
Degree of the function: _____
x-intercepts: _____

f) $f(x) = x(x - 2)(x + 1)(x + 3)$



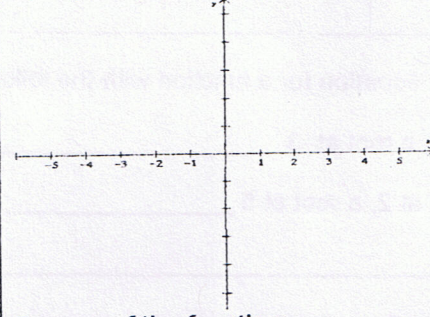
Degree of the function: _____
x-intercepts: _____

g) $f(x) = x(x-3)^3$



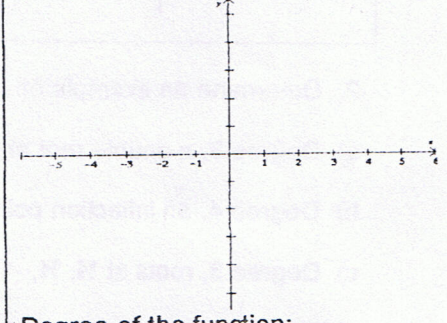
Degree of the function: _____
x-intercepts: _____

h) $f(x) = (x + 2)(x - 1)(x - 3)^2$



Degree of the function: _____
x-intercepts: _____

i) $f(x) = -(x - 2)(x + 3)^3$



Degree of the function: _____
x-intercepts: _____