

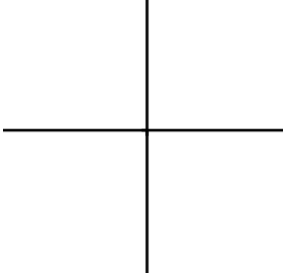
Polynomials 2b – End Behavior (Factored Form)
Homework #5

Name _____
Per _____ Date _____

1. The following polynomials are in factored form. State their degree, their leading coefficient, and their maximum number of turns. Then draw a sketch demonstrating their end-behavior.

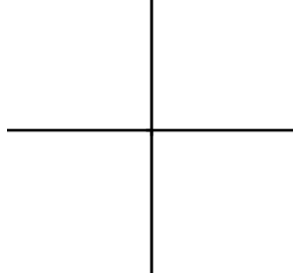
a) $f(x) = -3x(x - 2)(x + 5)(x + 1)$

Degree: _____
LC: _____
y-intercept: _____



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

Degree: _____
LC: _____
y-intercept: _____



2. Given each polynomial function, state the degree, the leading coefficient, and the y-intercept.

a) $f(x) = -5(x - 1)^2(x + 2)$

Degree: _____
LC: _____
y-intercept: _____

b) $f(x) = (x + 1)^2(x - 4)(-2x + 3)^2$

Degree: _____
LC: _____
y-intercept: _____

c) $f(x) = (x + 3)(x - 2)(x + 4)$

Degree: _____
LC: _____
y-intercept: _____

d) $f(x) = -3(x - 2)^2(x + 5)$

Degree: _____
LC: _____
y-intercept: _____

e) $f(x) = -3x(5x + 1)(x - 2)^3$

Degree: _____
LC: _____
y-intercept: _____

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

Degree: _____
LC: _____
y-intercept: _____