Polynomial Functions

Complete the chart.

	Equation	Degree	Type	# of Roots	End Behaviour
a)	$f(x) = 3x$				
b)	$f(x) = x - 4$				
c)	$f(x) = x^2 - x - 6$				
d)	$f(x) = (x+2)^2$				
e)	$f(x) = 2x^2 + 3$				
f)	$f(x) = x^3$				
g)	$f(x) = 0.5(x-4)^3$				
h)	$f(x) = (x+2)(x-3)(x+5)$				
i)	$f(x) = 3x^4 + 2x^2$				
j)	$f(x) = x^4 - 3x^2 + 2x - 6$				
k)	$f(x) = (x+5)(x-4)^2(x-2)$				
l)	$f(x) = 2(x+3)(x+1)(x-1)(x-3)$				
m)	$f(x) = x^5 + 3x^{2*} - 6$				
n)	$f(x) = 5x^5 + 6x^4 - 2x - 1$				
o)	$f(x) = (x+3)^3(x-2)^2$				
p)	$f(x) = \frac{1}{4}(x+4)(x+1)(x-2)(x-3)(x-7)$				

	Equation	Degree	Type	# of Roots	End Behaviour
q)	$f(x) = -3x + 2$				
r)	$f(x) = -2x^2 + 3x - 5$				
s)	$f(x) = -2(x+5)(x+4)$				
t)	$f(x) = -x^3$				
u)	$f(x) = -(x+3)^2(x-1)$				
v)	$f(x) = -2(x+4)(x+1)(x-3)$				
w)	$f(x) = -4x^4$				
x)	$f(x) = -\frac{1}{2}(x+5)^2(x+1)^2$				
y)	$f(x) = -2(x+3)^3(x-1)$				
z)	$f(x) = -(x+3)^3(x-2)^2$				
aa)	$f(x) = -2x^5$				