Converting quadratic functions to vertex form.   Class/section _____ Name _____

Directions: (each problem is done in its own column).

(A) Convert each quadratic to vertex form. Use the method shown in class.

(B) Check that the vertex is a point on the quadratic, by plugging in V_x and showing that $f(V_x) = V_y$.

(C) Set y=f(x) to zero, to find the roots (x-intercepts) of the quadratic.

(D) Find the roots using the quadratic formula to check part (C).

(E) Use the discriminant to see if the original f(x) can be factored over the integers. If so, factor it.
    Use the factored form to find the roots. Are these roots the same ones you found in part C,D?

	$f(x) = -3x^2+4x-5$	$f(x) = 6x^2-5x-6$	$f(x) = 3x^2-18x+27$
A			
B			
C			
D			
E			