6.

Solution

Quadratic function: is a function that can be written in the form:

$p(f)=af^2+bf+c$ where a, b, and c are real numbers and $a\neq 0$

we have $p(f)=-f^2-2f-3$, note: $-f^2-2f-3$ is in fp-plane

Here, we know that $a=-1$, $b=-2$, $c=-3$

Since $a<0$,we know that the p-coordinate of the vertex is a maximum.However,to find the p-coordinate of our vertex we first need to find the f-coordinate of the vertex by using $f=-\frac{b}{2a}=-1=-1$ Now that we have the f-coordinate, we can find the p-coordinate

of the vertex by finding $p(-1)=-1(-1)^2-2(-1)-3=-1+2-3=-2$ Maximum$=-2$