2.

Solution

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

$j(g)=ag^2+bg+c$ where a, b, and c are real numbers and $a\neq 0$

we have $j(g)=g^2+14g+15$, note: $g^2+14g+15$ is in gj-plane

Here, we know that $a=1$, $b=14$, $c=15$

Since $a>0$,we know that the j-coordinate of the vertex is a minimum. However,to find the j-coordinate of our vertex we first need to find the g-coordinate of the vertex by using $g=-\frac{b}{2a}=-\frac{14}{2}=-7$ Now that we have the g-coordinate, we can find the j-coordinate of the vertex by finding $j(-7)=(-7)^2+14(-7)+15=49-98+15=-34$ Minimum=-34