In[248]:=

```
y = {1, 2, 3, 10, 11};
f = {2, 5, 10, 20, 3};
n = Length[y];
n = Length[f];
i = 1;
While[i ≤ n, L[i, x_] = (Product[(x - y[[j]]) / (y[[i]] - y[[j]]), {j, j = 1, i - 1}]) *
    (Product[(x - y[[j]]) / (y[[i]] - y[[j]]), {j, j = i + 1, n}]);
  i++];
Lagrange[x_] = Sum[(L[k, x] * f[[k]]), {k, k = 1, n}];
g = Simplify[N[Lagrange[x]]];
Print["Simplyfied Lagrange Interpolating Polynomial=" g]
```

```
Simplyfied Lagrange Interpolating Polynomial=
(1.69048 - 1.23849 x + 1.64028 x^2 - 0.0876984 x^3 - 0.00456349 x^4)
```