

## Experiment 3

### >> MATLAB Code

```
%Coefficient matrix of polynomial function f and g
f = [15 -7 2 4];
g = [9 -17 3];

%Product of f and g
prod_const = conv(f,g)

%Roots of f and g
root_f = roots(f)
root_g = roots(g)

%Quotient and Remainder when f is divided by g
[Q,R] = deconv(f,g);
Quotient = Q
Remainder = R

%Value of f at 3 and g at 2i
value_f = polyval(f,3)
value_g = polyval(g,2i)
```

### >> Command Window

```
prod_const =

    135   -318   182   -19   -62    12

root_f =

    0.4672 + 0.5933i
    0.4672 - 0.5933i
   -0.4676 + 0.0000i

root_g =

    1.6919
    0.1970

Quotient =

    1.6667    2.3704

Remainder =

     0     0   37.2963  -3.1111

value_f =

    352

value_g =

   -33.0000  -34.0000i

>>
```