
USING CONVOLUTION TO MULTIPLY POLYNOMIALS

```
close all; clearvars; clc
```

```
a = [3 1 5];
```

```
b = [1 0 -2 4 -1];
```

```
c = conv(a,b)
```

```
-9z^2 +19z -5 [EXPECTED]
```

```
% a(x) = 3z^2 +z +5
```

```
% b(x) = z^4 -2z^2 +4z -1
```

```
% c(x) = a(x)*b(x) = 3z^6 +z^5 -z^4 +10z^3
```

```
c =
```

```
3      1      -1     10     -9     19     -5
```

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