```
clear all
```

q = 5

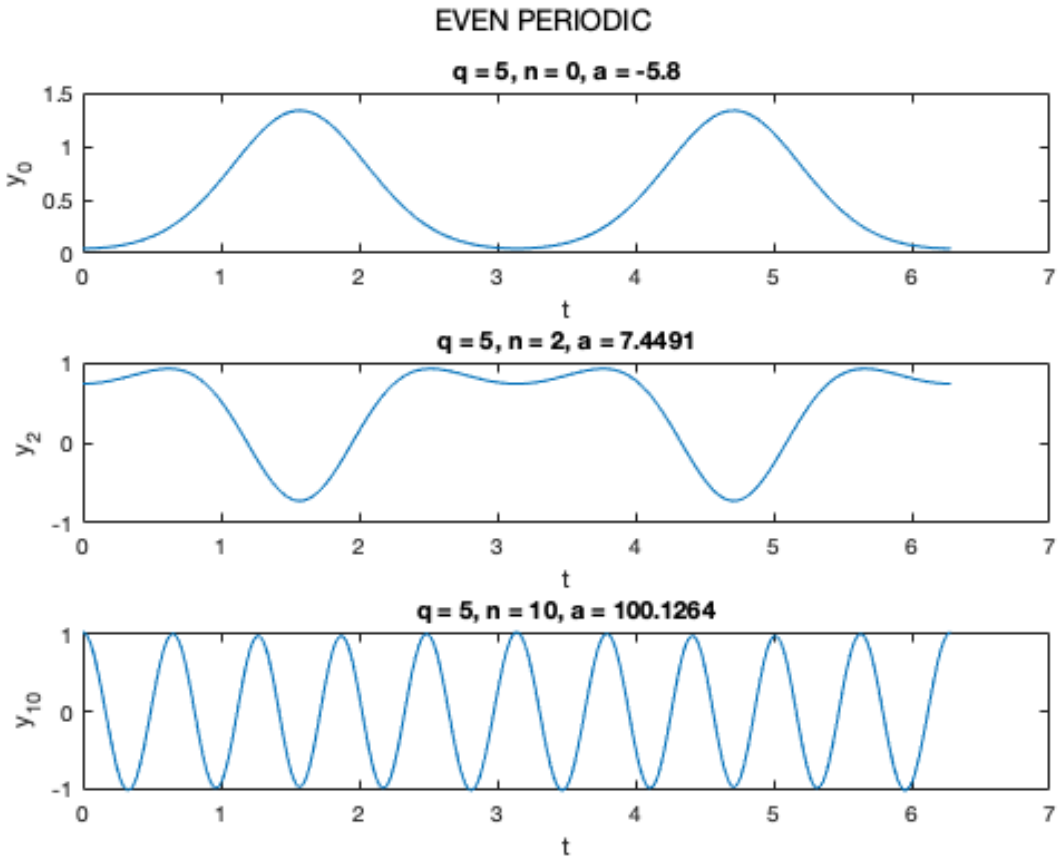
```
fprintf('        ---- Eigenvalues for q = 5 ----\n');
fprintf('            ---- EVEN PERIODIC ----\n');
MathieuEP(5,1);
fprintf('          ---- EVEN ANTIPERIODIC ----\n');
MathieuEA(5,2);
fprintf('            ---- ODD PERIODIC ----\n');
MathieuOP(5,3);
fprintf('          ---- ODD ANTIPERIODIC ----\n');
MathieuOA(5,4);
```

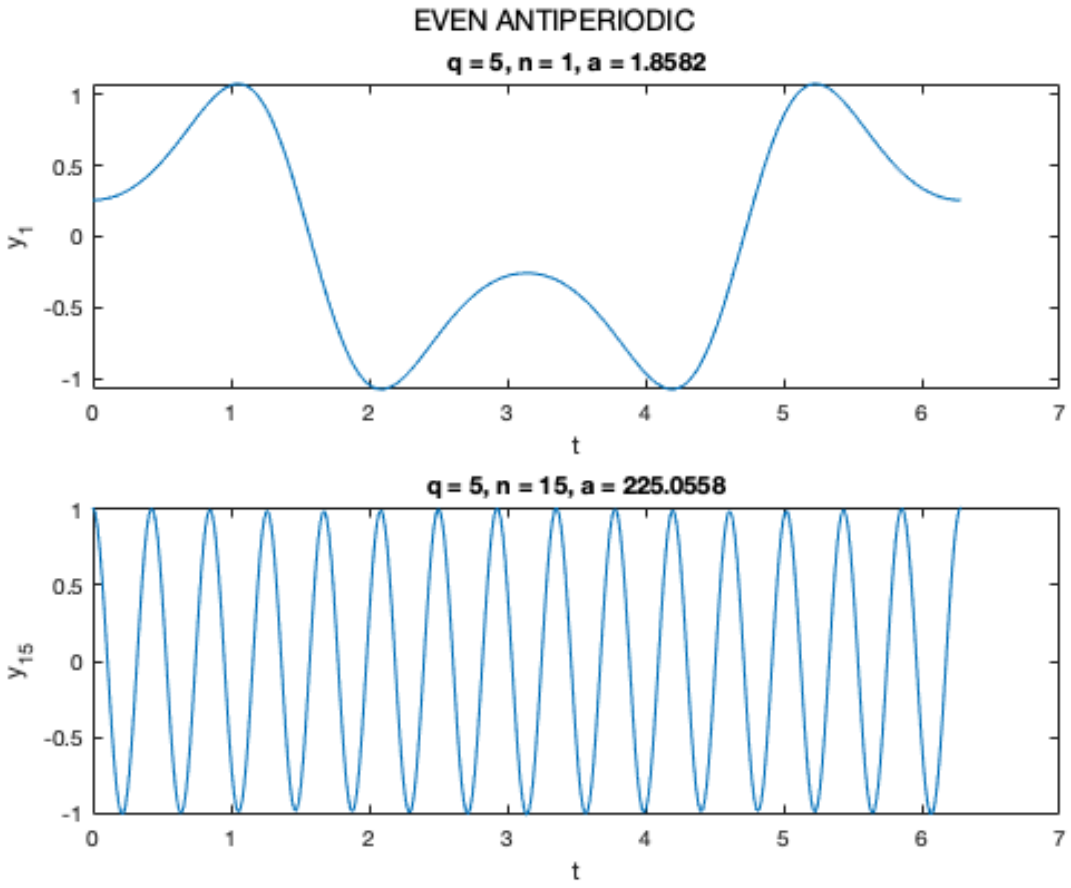
q = 25

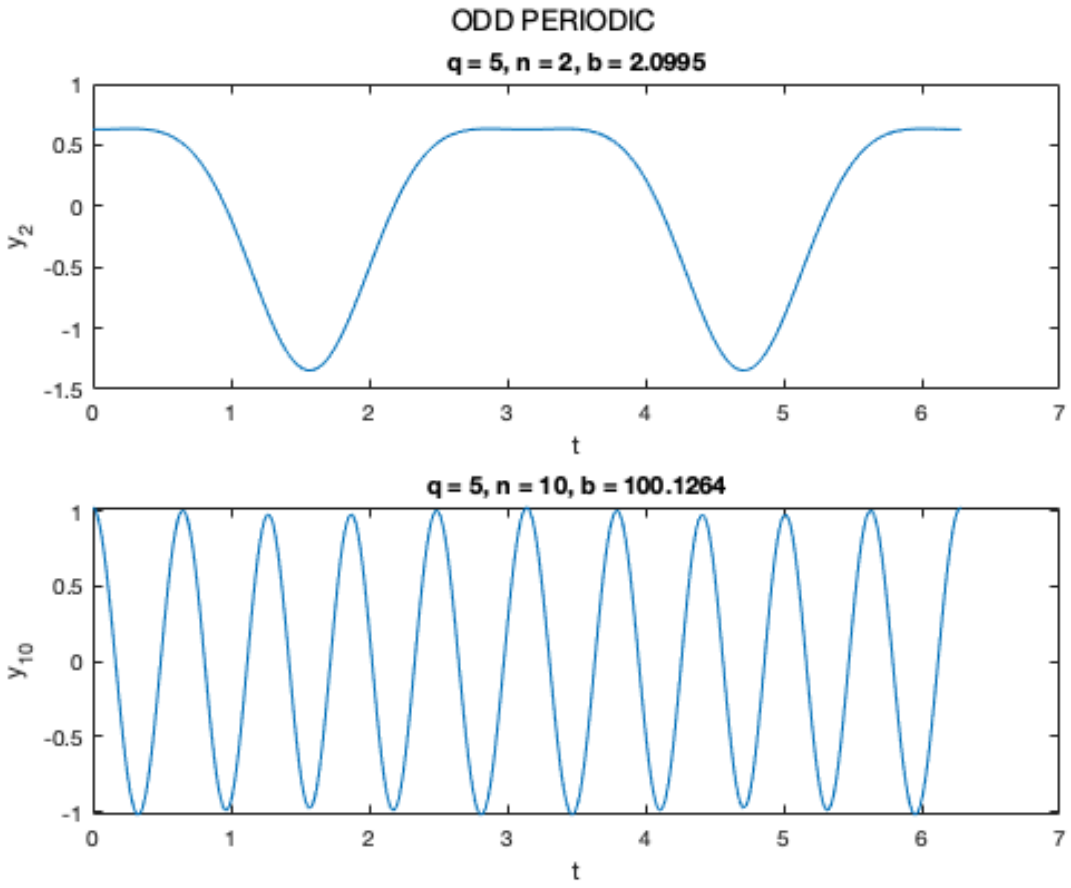
```
fprintf('\n\n')
fprintf('        ---- Eigenvalues for q = 25 ----\n');
fprintf('            ---- EVEN PERIODIC ----\n');
MathieuEP(25,5);
fprintf('          ---- EVEN ANTIPERIODIC ----\n');
MathieuEA(25,6);
fprintf('            ---- ODD PERIODIC ----\n');
MathieuOP(25,7);
fprintf('          ---- ODD ANTIPERIODIC ----\n');
MathieuOA(25,8);
```

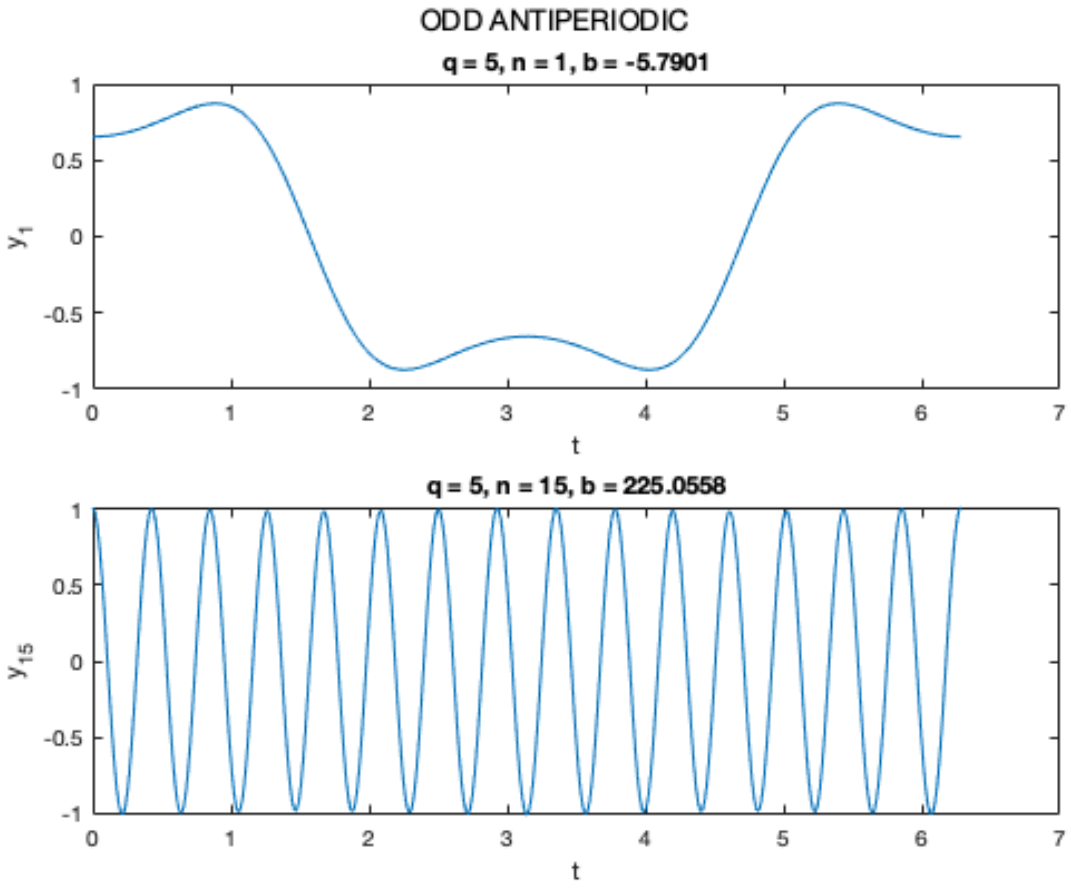
```
        ---- Eigenvalues for q = 5 ----
            ---- EVEN PERIODIC ----
a_0 = -5.800046021
a_2 = 7.44910974
a_10 = 100.1263692
          ---- EVEN ANTIPERIODIC ----
a_1 = 1.858187542
a_15 = 225.0558125
            ---- ODD PERIODIC ----
b_2 = 2.099460445
b_10 = 100.1263692
          ---- ODD ANTIPERIODIC ----
b_1 = -5.790080599
b_15 = 225.0558125


        ---- Eigenvalues for q = 25 ----
            ---- EVEN PERIODIC ----
a_0 = -40.25677955
a_2 = -3.522164727
a_10 = 103.2302048
          ---- EVEN ANTIPERIODIC ----
a_1 = -21.31489969
```

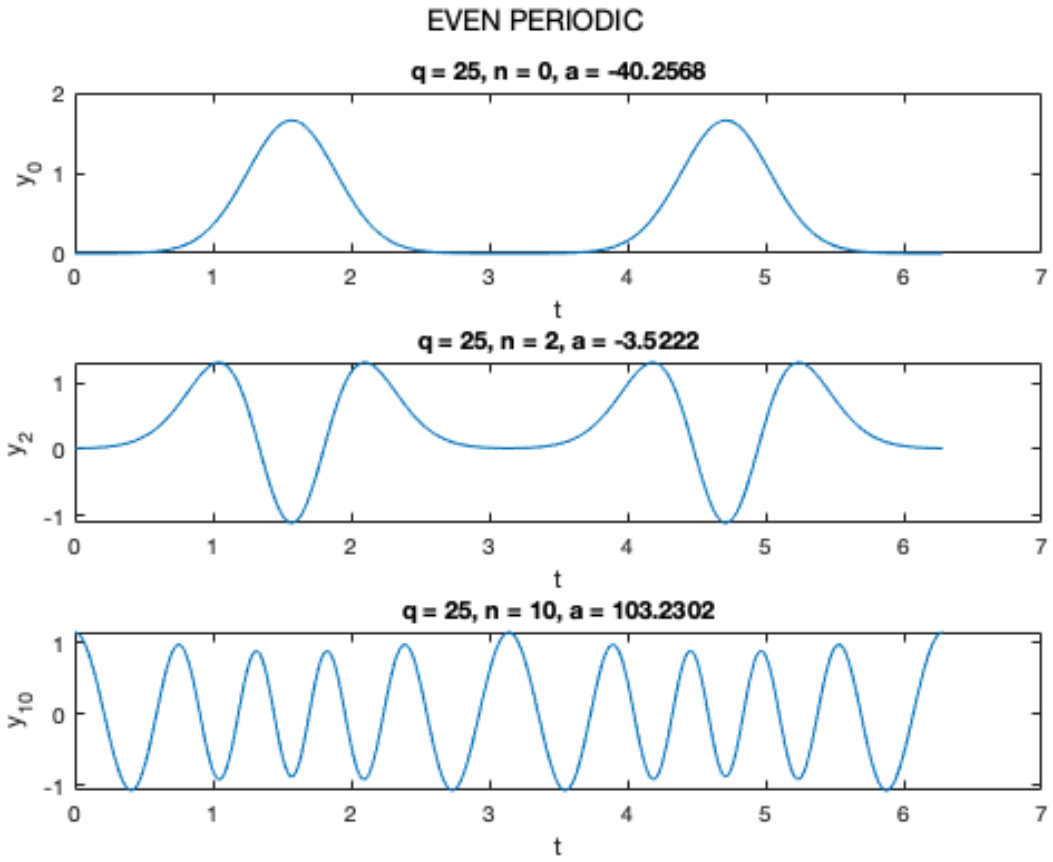
```
a_15 = 226.40072
            ---- ODD PERIODIC ----
b_2 = -21.31486062
b_10 = 103.22568
          ---- ODD ANTIPERIODIC ----
b_1 = -40.25677898
b_15 = 226.40072
```

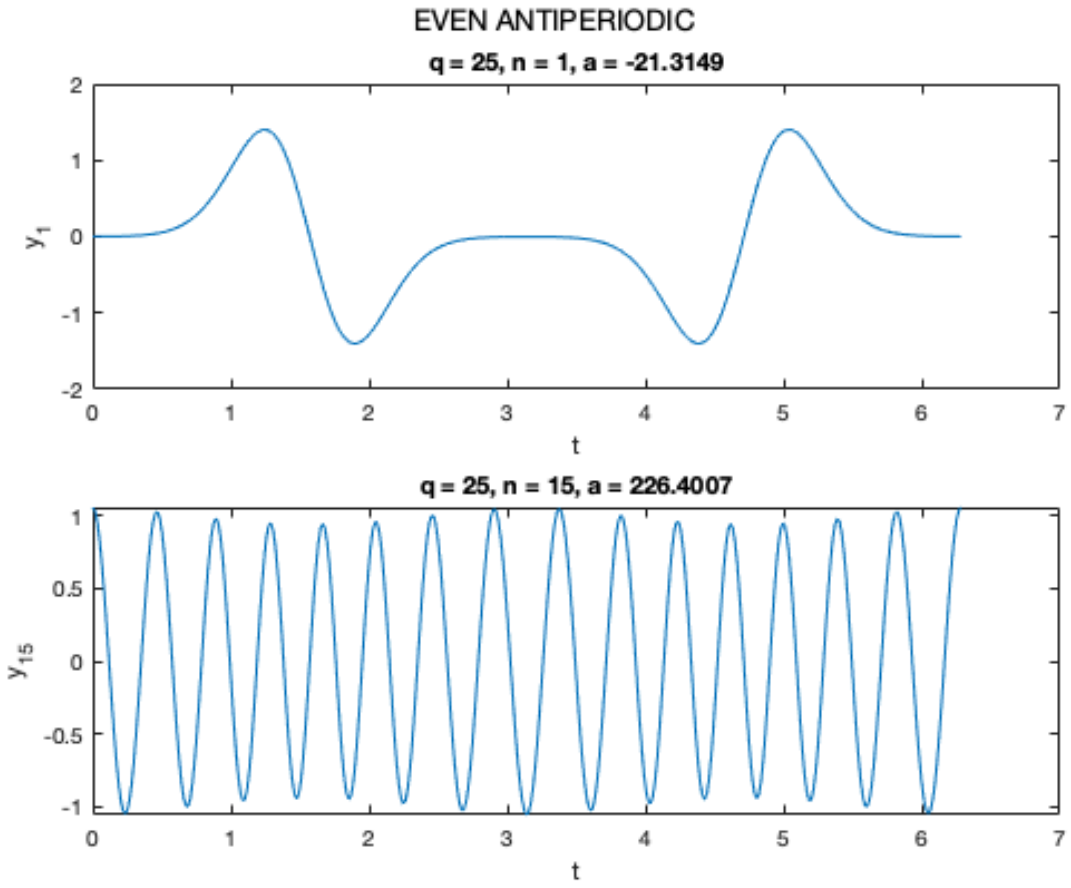


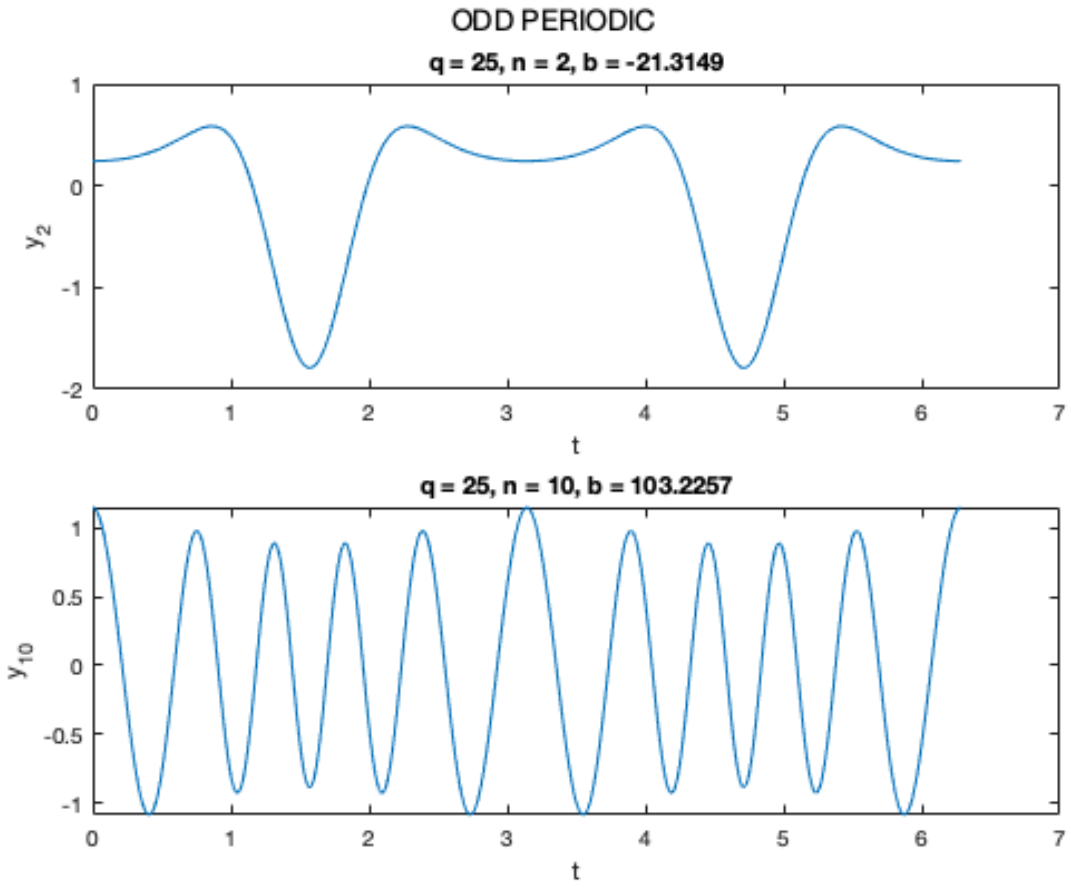

EVEN ANTIPERIODIC
q = 5, n = 1, a = 1.8582
y1
t
q = 5, n = 15, a = 225.0558
y15
t

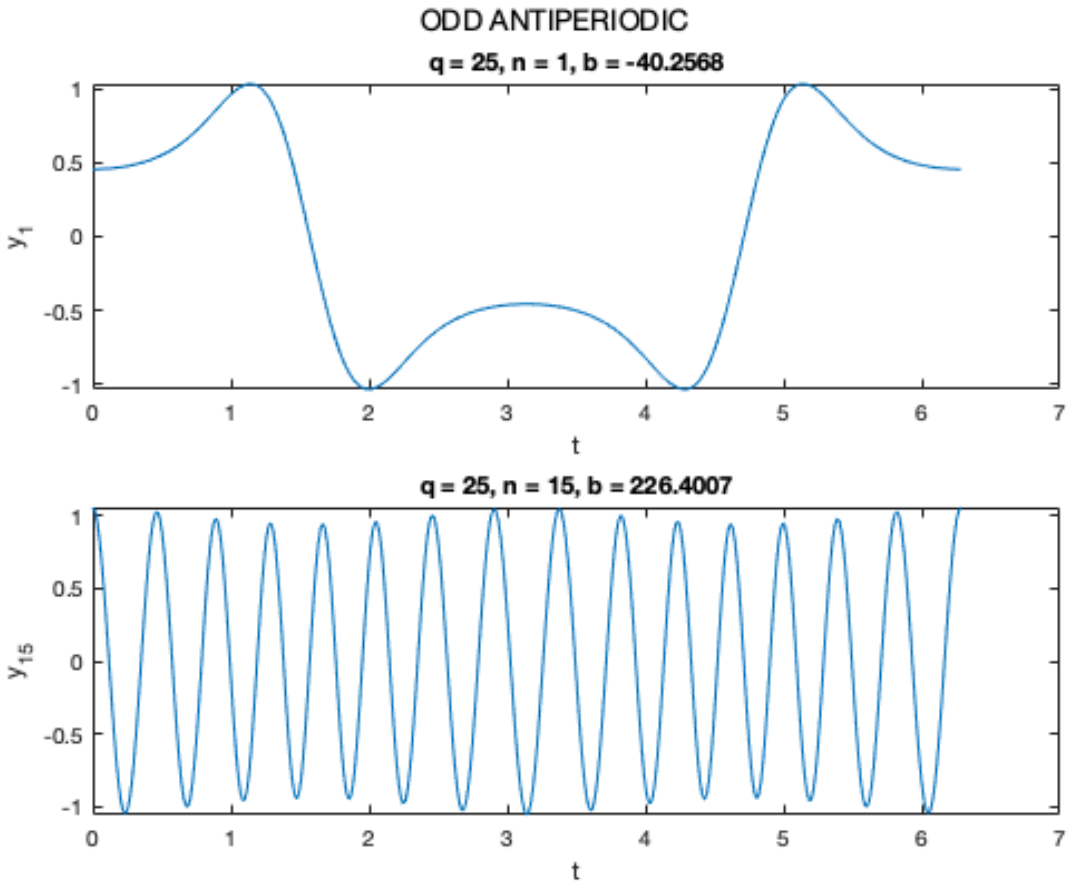

ODD PERIODIC
q = 5, n = 2, b = 2.0995
y2
t
q = 5, n = 10, b = 100.1264
y10
t


ODD ANTIPERIODIC
q = 5, n = 1, b = -5.7901
y1
t
q = 5, n = 15, b = 225.0558
y15
t


EVEN PERIODIC
q = 25, n = 0, a = -40.2568
y0
t
q = 25, n = 2, a = -3.5222
y2
t
q = 25, n = 10, a = 103.2302
y10
t


EVEN ANTIPERIODIC
q = 25, n = 1, a = -21.3149
y1
t
q = 25, n = 15, a = 226.4007
y15
t


ODD PERIODIC
q = 25, n = 2, b = -21.3149
y2
t
q = 25, n = 10, b = 103.2257
y10
t



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