```
In [ ]:  A = [1 1 1 -2 -2; 1 2 4 -10 -20; 1 3 9 -27 -81; 1 4 16 4 16; 1 5 25 20 100]
```

```
Out[ ]:  5×5 Matrix{Int64}:
         1  1   1   -2   -2
         1  2   4  -10  -20
         1  3   9  -27  -81
         1  4  16    4   16
         1  5  25   20  100
```

```
In [ ]:  B = [2; 5; 9; -1; -4]
```

```
Out[ ]:  5-element Vector{Int64}:
          2
          5
          9
         -1
         -4
```

```
In [ ]:  x = inv(A)*B
         println("c1 = ", x[1])
         println("c2 = ", x[2])
         println("c3 = ", x[3])
         println("d1 = ", x[4])
         println("d2 = ", x[5])
```

```
c1 = 0.6296296296296291
c2 = 0.6049382716049365
c3 = -0.19753086419753213
d1 = -0.5679012345679013
d2 = 0.08641975308641972
```

```
In [ ]:  function f(t, X = x)
             return ((x[1] + (x[2] * t) + (x[3] * t * t))
                 /(1 + (x[4] * t) + (x[5] * t * t)))
         end
```

```
Out[ ]:  f (generic function with 2 methods)
```

```
In [ ]:  using Plots
         Plots.PyPlotBackend()
         plot(f, 0, 6, framestyle = :zerolines, xlabel = "t", ylabel = "f(t)"
             , ylims = (-6, 10), yticks = -6:2:10, lw = 2, label = :none)
         scatter!(f,[1:5], label = :none)
```