[ARTEM DUDKO] - [LAB #3] - [2/5/2020]

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[PROBLEM #5]

```
format bank, format compact, clear, clc, close all

V = [4000:-500:1000]'
r = (0.75*V/pi).^(1/3);
r = round(r,1)
s = r.^2 * 4 * pi;
s = round(s,1)
finalTable = table(r,s,V)
```

```
V =
       4000.00
       3500.00
       3000.00
       2500.00
       2000.00
       1500.00
       1000.00
r =
          9.80
          9.40
          8.90
          8.40
          7.80
          7.10
          6.20
s =
       1206.90
       1110.40
        995.40
        886.70
        764.50
        633.50
        483.10
finalTable =
  7×3 table
     r         s          V
    ____    _______    _______
    9.80    1206.90    4000.00
    9.40    1110.40    3500.00
    8.90     995.40    3000.00
```

```
    8.40     886.70    2500.00
    7.80     764.50    2000.00
    7.10     633.50    1500.00
    6.20     483.10    1000.00
```

[PROBLEM #10]

```
format compact, clear, clc, close all

uOne = [3.2 -6.8 9];
uTwo = [-4 2 7];
angle = acosd(((sum(uOne .* uTwo)) / ( sqrt(sum(uOne .* uOne)) *
 sqrt(sum(uTwo .* uTwo)))))

angle =
         67.93
```

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