

# Uživatel:Dean/Pískoviště

Dokažte, že napětí na pseudounipolárním Golbergově svodu je 1,5-násobek napětí klasického unipolárního svodu.

Řešení

[Expand]

Derive the formula for pH of a weak acid with initial concentration  $c$  and acid disocciation constant  $K$ . Neglect the self-ionization of water.

Solution

[Expand]

Prove the identity  $\log(xy)=\log(x)+\log(y)$ .

Solution

[Expand]

Derive the formula for expressing  $\log(x)$  in the terms of  $\ln(x)$ .

Solution

[Expand]

Derive the formula for hydrostatic pressure of incompressible fluid.

Solution

[Expand]

Derive the formula for atmospheric pressure as a function of altitude. Assume the air is ideal gas with constant temperature.

Solution

[Expand]

## Kalkulačka srdeční osy - Python

```
import math

print("QRS amplitude in lead I [mV]:")
I=float(input())
print("QRS amplitude in lead aVF [mV]:")
aVF=float(input())

if I!=0:
    if I>0:
        axis=math.atan((aVF*2)/(math.sqrt(3)*I))

    if I<0 and aVF>=0:
        axis=math.atan((aVF*2)/(math.sqrt(3)*I))+math.pi

    if I<0 and aVF<0:
        axis=math.atan((aVF*2)/(math.sqrt(3)*I))-math.pi

    print("Cardiac axis is",int(180*axis/math.pi), "degrees.")

if I==0:
    if aVF>0:
        print("Cardiac axis is",90, "degrees.")

    if aVF<0:
        print("Cardiac axis is",-90, "degrees.")

    if aVF==0:
        print("Cardiac axis is undefined. Verify input values or electrode placement.")
```

## Formátovanie matematiky

- Lead sentence should include **article title** in bold, along with **alternative names** also in bold.
- Use  $\frac{1}{2}$  to display fraction inline without compromising line width. Similarly  $\sum_{n=1}^{\infty} 1/n^2 = \pi^2/6$  and  $\sqrt{x+y}$ .
- Differential operator ***d*** can be italic or upright, but consistently so.
- Both **formulas** and **formulae** are acceptable.

Viac info: [https://en.wikipedia.org/wiki/Wikipedia:Manual\\_of\\_Style/Mathematics](https://en.wikipedia.org/wiki/Wikipedia:Manual_of_Style/Mathematics)

## Sandbox

