

## II.

[ ] fill in the units in the square brackets

### Task: Viscosity

**Keywords: definition of viscosity, kinematic viscosity, Newtonian and non-Newtonian fluids,**

Measured values: **Unknown liquid**

| Temperature [ ] | Time 1. [ ] | Time 2. [ ] | Time 3. [ ] | Average time |
|-----------------|-------------|-------------|-------------|--------------|
|                 |             |             |             |              |
|                 |             |             |             |              |
|                 |             |             |             |              |
|                 |             |             |             |              |

Measured values: **Distilled water**

| Temperature [ ] | Time 1. [ ] | Time 2. [ ] | Time 3. [ ] | Average time |
|-----------------|-------------|-------------|-------------|--------------|
|                 |             |             |             |              |
|                 |             |             |             |              |
|                 |             |             |             |              |
|                 |             |             |             |              |

Calculated values: **Kinematic viscosity of distilled water**

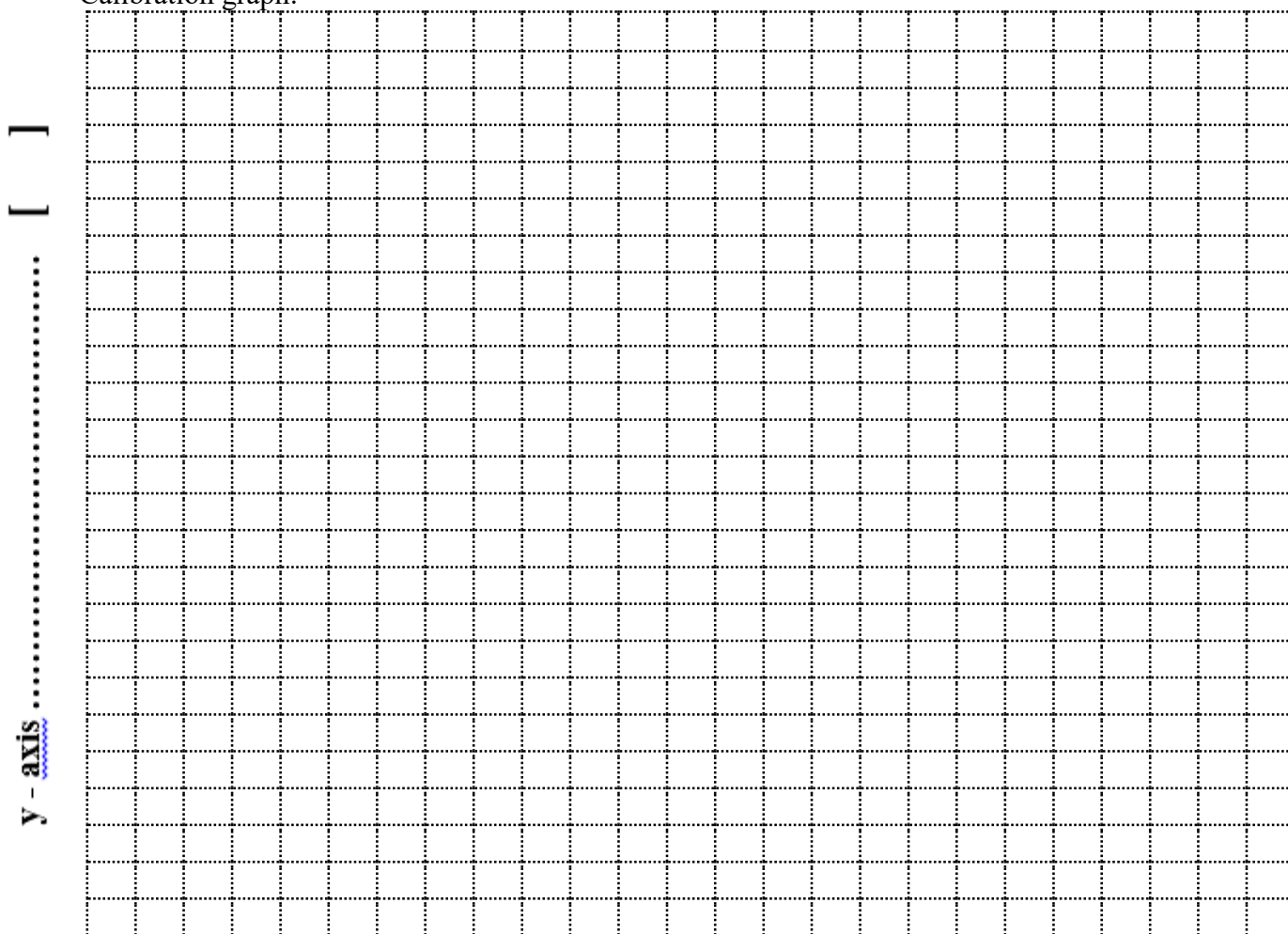
| Temperature [ ] | Dynamic viscosity [ ] | Density [ ] | Kinematic viscosity [ ] |
|-----------------|-----------------------|-------------|-------------------------|
|                 |                       |             |                         |
|                 |                       |             |                         |
|                 |                       |             |                         |
|                 |                       |             |                         |

Calculated values: **Kinematic viscosity of unknown liquid**

| Temperature [ ] | Kinematic viscosity [ ] |
|-----------------|-------------------------|
|                 |                         |
|                 |                         |
|                 |                         |
|                 |                         |

Notes/calculations:

Calibration graph:



x - axis ..... [ ]

**Discussion:**

Importance for the medicine / connection with the health and illness:

Possible errors and accuracy:

Conclusion:

**Task: The surface tension of liquids**

**Keywords:** definition of surface tension, causes, surfactants, Liquid in a vertical tube,  
Measured values: **Digital Tensiometer K9**

| Liquid Nr.      | Surface tension [ ] |
|-----------------|---------------------|
| Distilled water |                     |
| X1              |                     |
| X2              |                     |
| X3              |                     |

Measured values: **Stalagmometer**

| Liquid Nr.      | Weight/empty [ ] | Weight/ with 50 drops [ ] | Weight 50 drops [ ] | Surface tension [ ] |
|-----------------|------------------|---------------------------|---------------------|---------------------|
| Distilled water |                  |                           |                     |                     |
| X1              |                  |                           |                     |                     |
| X2              |                  |                           |                     |                     |
| X2              |                  |                           |                     |                     |

Notes/calculations:

**Discussion:**

Importance for the medicine / connection with the health and illness:

Possible errors and accuracy:

Conclusion: