

Autod II Machine

Name and Surname: Group: Date of Experiment:

Table of Experimental Results

$x =$ n.....	30	60	90	120	150
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
$t_{\text{moy}} \text{ calc}$					
$t_{\text{moy}} \text{ exp}$					
$\sigma_t \text{ calc}$					
$\sigma_t \text{ exp}$					

Questions:

- 1) Fill in the experimental results table after ensuring that there are no outliers.
- 2) Plot the experimental curve $x = f(t)$ with the solid friction family and the viscous friction family.
- 3) What is the position of the experimental curve relative to the theoretical curve drawn without friction? What does This position mean physically ?

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- 4) Comparing the experimental curve with the two families of theoretical curves (solid friction and viscous friction): Which type of friction prevails? Full explanations must be provided for your answer

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- 5) Determine the friction force graphically at the two points ($x=90$ cm) and ($x=150$ cm).....

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