

### 5.1. График зависимости от времени мгновенных значений тока на всех элементах третьей ветви.

Для третьей ветви:

| t (с) | i (мА)    |
|-------|-----------|
| 0     | -1.652984 |
| 0.05  | -1.598466 |
| 0.1   | -1.477867 |
| 0.15  | -1.296174 |
| 0.2   | -1.060897 |
| 0.25  | -0.781764 |
| 0.3   | -0.470312 |
| 0.35  | -0.139419 |
| 0.4   | 0.1972386 |
| 0.45  | 0.5257421 |
| 0.5   | 0.8325116 |
| 0.55  | 1.1048655 |
| 0.6   | 1.3315447 |
| 0.65  | 1.5031785 |
| 0.7   | 1.6126715 |
| 0.75  | 1.6554973 |
| 0.8   | 1.6298856 |
| 0.85  | 1.5368951 |
| 0.9   | 1.38037   |
| 0.95  | 1.166781  |
| 1     | 0.9049578 |
| 1.05  | 0.6057241 |
| 1.1   | 0.2814499 |
| 1.15  | -0.054459 |
| 1.2   | -0.388117 |
| 1.25  | -0.70573  |
| 1.3   | -0.994169 |
| 1.35  | -1.241509 |
| 1.4   | -1.437526 |
| 1.45  | -1.574116 |
| 1.5   | -1.645633 |
| 1.55  | -1.649119 |
| 1.6   | -1.584433 |
| 1.65  | -1.454246 |
| 1.7   | -1.263941 |
| 1.75  | -1.021386 |
| 1.8   | -0.736607 |
| 1.85  | -0.421377 |
| 1.9   | -0.088727 |
| 1.95  | 0.2475903 |
| 2     | 0.5736725 |
| 2.05  | 0.8760394 |
| 2.1   | 1.1421912 |
| 2.15  | 1.3611253 |
| 2.2   | 1.523791  |
| 2.25  | 1.6234639 |
| 2.3   | 1.6560235 |
| 2.35  | 1.6201238 |
| 2.4   | 1.5172489 |
| 2.45  | 1.3516515 |
| 2.5   | 1.1301775 |





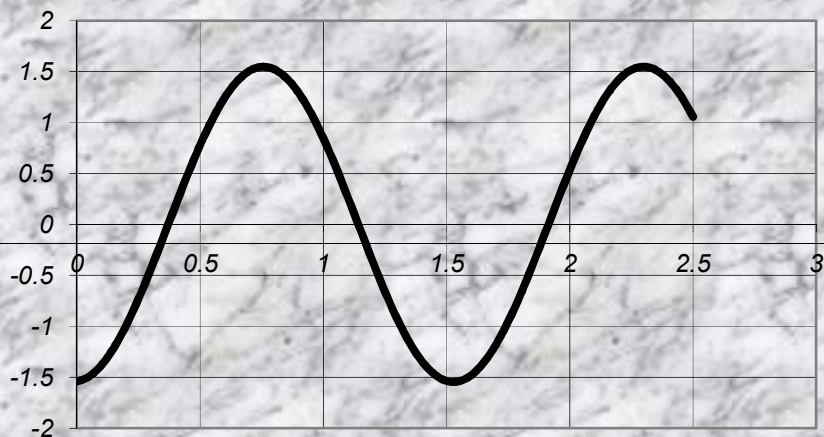


## 5.2. График зависимости от времени мгновенных значений напряжения на всех элементах третьей ветви.

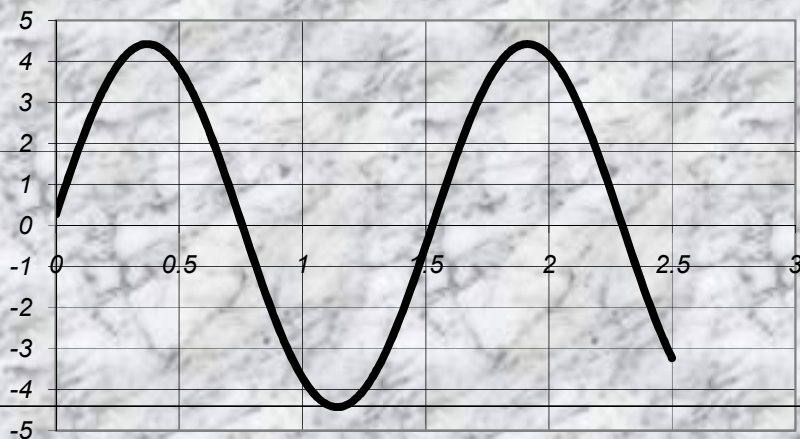
Для третьей ветви:

| t (с) | u[R] (В)  | u[L] (В)     | u[C] (мВ)    |
|-------|-----------|--------------|--------------|
| 0     | -1.544291 | 0.269762158  | -0.007056281 |
| 0.05  | -1.493357 | 1.157572281  | -0.030053683 |
| 0.1   | -1.380689 | 1.997528862  | -0.051808678 |
| 0.15  | -1.210943 | 2.754908457  | -0.071421924 |
| 0.2   | -0.991137 | 3.398401318  | -0.088082619 |
| 0.25  | -0.730358 | 3.901405728  | -0.101102016 |
| 0.3   | -0.439387 | 4.243127698  | -0.109941899 |
| 0.35  | -0.130251 | 4.409440591  | -0.114236831 |
| 0.4   | 0.184269  | 4.393469101  | -0.113809262 |
| 0.45  | 0.4911715 | 4.195873484  | -0.108676867 |
| 0.5   | 0.7777692 | 3.824822257  | -0.099051816 |
| 0.55  | 1.0322142 | 3.29565452   | -0.085332006 |
| 0.6   | 1.243988  | 2.630245839  | -0.068084608 |
| 0.65  | 1.4043358 | 1.856103923  | -0.048022621 |
| 0.7   | 1.506629  | 1.005231468  | -0.025975399 |
| 0.75  | 1.5466388 | 0.112803175  | -0.002854366 |
| 0.8   | 1.5227112 | -0.784288352 | 0.020384666  |
| 0.85  | 1.4358354 | -1.648957736 | 0.042781004  |
| 0.9   | 1.2896027 | -2.445459914 | 0.063408794  |
| 0.95  | 1.0900585 | -3.140867829 | 0.081415292  |
| 1     | 0.8454516 | -3.706433616 | 0.096056116  |
| 1.05  | 0.5658942 | -4.118777027 | 0.106726022  |
| 1.1   | 0.262943  | -4.360851963 | 0.11298392   |
| 1.15  | -0.050878 | -4.422651151 | 0.114571111  |
| 1.2   | -0.362596 | -4.301619837 | 0.111421981  |
| 1.25  | -0.659324 | -4.002761406 | 0.103666715  |
| 1.3   | -0.928797 | -3.538430535 | 0.091625911  |
| 1.35  | -1.159873 | -2.927822464 | 0.075797331  |
| 1.4   | -1.343    | -2.196179469 | 0.056835322  |
| 1.45  | -1.470609 | -1.373747357 | 0.035523765  |
| 1.5   | -1.537423 | -0.494525119 | 0.012743671  |
| 1.55  | -1.54068  | 0.405140575  | -0.01056324  |
| 1.6   | -1.480247 | 1.288057932  | -0.033433472 |
| 1.65  | -1.358621 | 2.117727527  | -0.054921579 |
| 1.7   | -1.18083  | 2.859851174  | -0.074139251 |
| 1.75  | -0.954224 | 3.483749801  | -0.090292038 |
| 1.8   | -0.688171 | 3.963631707  | -0.102712192 |
| 1.85  | -0.393669 | 4.279658778  | -0.110886267 |
| 1.9   | -0.082893 | 4.418766591  | -0.114476351 |
| 1.95  | 0.2313098 | 4.37520449   | -0.113334033 |
| 2     | 0.5359502 | 4.150773313  | -0.107506534 |
| 2.05  | 0.8184347 | 3.754750947  | -0.097234761 |
| 2.1   | 1.0670855 | 3.203508789  | -0.082943344 |
| 2.15  | 1.2716234 | 2.519834952  | -0.065223086 |
| 2.2   | 1.423593  | 1.73199222   | -0.044806533 |
| 2.25  | 1.5167118 | 0.872549672  | -0.022537697 |
| 2.3   | 1.5471304 | -0.022963705 | 0.000662837  |
| 2.35  | 1.5135913 | -0.917527772 | 0.02383597   |
| 2.4   | 1.417481  | -1.774161634 | 0.046023735  |
| 2.45  | 1.2627726 | -2.557452416 | 0.066308897  |
| 2.5   | 1.0558618 | -3.235019213 | 0.083852879  |

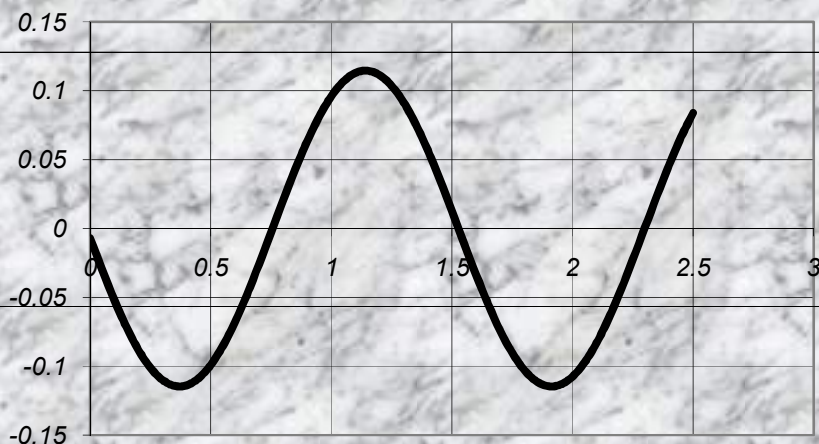
Мгновенные значения напряжения на  $R_3$



Мгновенные значения напряжения на  $L_3$

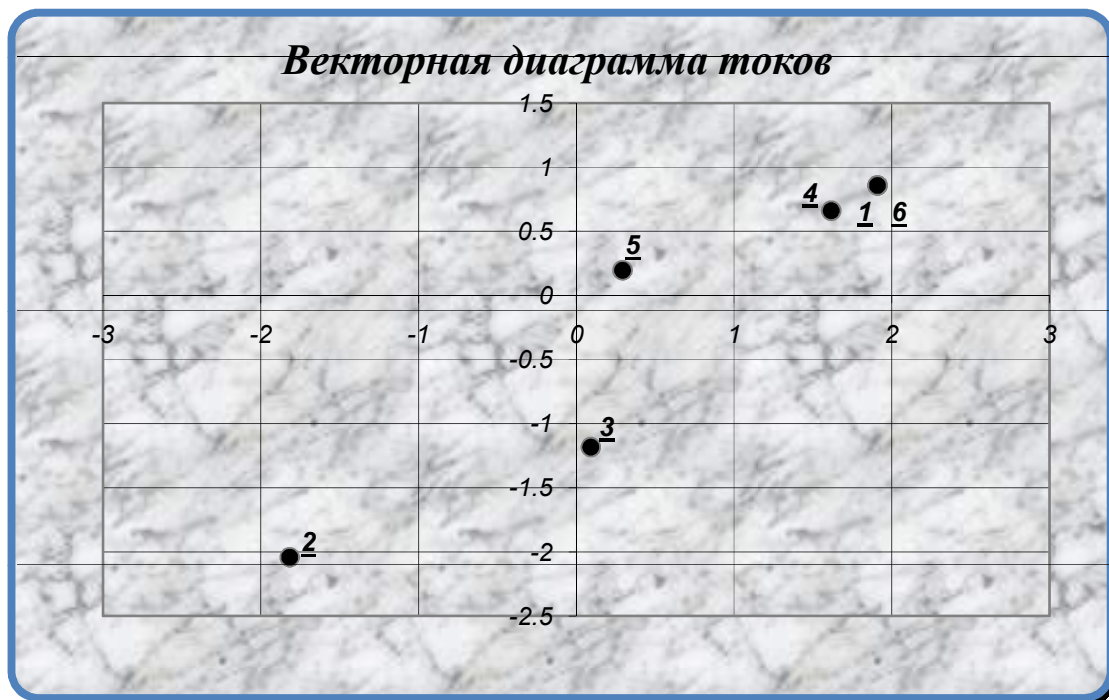


Мгновенные значения напряжения на  $C_3$



6. Построить векторную диаграмму токов.

| № тока | Re( $\varphi$ ) (мА) | Im( $\varphi$ ) (мА) |
|--------|----------------------|----------------------|
| 1      | 1.909                | 0.8588               |
| 2      | -1.817               | -2.041               |
| 3      | 0.09213              | -1.182               |
| 4      | 1.616                | 0.6615               |
| 5      | 0.2933               | 0.1973               |
| 6      | 1.909                | 0.8588               |



7. Построить топографическую диаграмму напряжений для всех точек, принадлежащих внешнему замкнутому контуру.

| №  | Re( $\varphi$ ) (A) | Im( $\varphi$ ) (A) |
|----|---------------------|---------------------|
| 1  | 0                   | 0                   |
| 2  | -1.783              | -0.802              |
| 3  | -1.897              | -0.549              |
| 4  | -2.075              | -0.622              |
| 5  | -0.375              | -4.4                |
| 6  | 5.075               | -9.251              |
| 7  | 3.721               | -10.772             |
| 8  | 3.536               | -10.607             |
| 9  | -3.536              | -3.536              |
| 10 | -1.3326E-15         | 3.997E-15           |

