Q5 - K = 0.38 for 4s rise time.....Matlab says 0.444

Q6 - K = 0.0651 for 20% overshoot

|  |  |  |
| --- | --- | --- |
| Kp | Kd | Ki |
| 0.1 | 0.1 | 0.1 |
| 1 | 0.1 | 0.1 |
| 10 | 0.1 | 0.1 |
| 0.1 | 1 | 1 |
| 1 | 1 | 1 |
| 10 | 1 | 1 |
| 0.1 | 10 | 10 |
| 1 | 10 | 10 |
| 10 | 10 | 10 |
| 0.1 | 0.1 | 0.1 |
| 0.1 | 1 | 0.1 |
| 0.1 | 10 | 0.1 |
| 1 | 0.1 | 1 |
| 1 | 1 | 1 |
| 1 | 10 | 1 |
| 10 | 0.1 | 10 |
| 10 | 1 | 10 |
| 10 | 10 | 10 |
| 0.1 | 0.1 | 1 |
| 0.1 | 0.1 | 10 |
| 1 | 1 | 0.1 |
| 1 | 1 | 1 |
| 1 | 1 | 10 |
| 10 | 10 | 0.1 |
| 10 | 10 | 1 |
| 10 | 10 | 10 |