q1.

To obtain higher accurarcy, each algorithm is done 10 times in the loop while time counting. With 5 trials.

Alg1

|  |
| --- |
| 1: 15ms, 2: 19ms 3: 20ms 4: 17ms 5: 14ms |

Alg2

|  |
| --- |
| 12,11,11,12,12 |

Alg3

|  |
| --- |
| 52,52,55,59,52 |

Performance:

Alg2>Alg1>Alg3

While Alg1 and Alg2 are using Euler Sieve algorithm for faster screening, Alg3 is a primitive algorithm that test each no’s primeness by quotients less than sqrt(itself), this explains the performance difference.