## PROBLEM 4 (1/1 point)

What can we do efficiently using the Sieve of Eratosthenes? Choose the correct sentence.

- We can efficiently check whether a given large integer is a prime number or not.
- We can efficiently calculate the product of two large prime numbers.
- We can efficiently count the number of primer numbers between 10,000 and 10,100.
- ✔ We can efficiently make a list of all prime numbers less than 100.

*You have used 1 of 2 submissions*

## PROBLEM 5 (2/2 points)

Perform by yourself the Sieve of Eratosthenes for integers less than 50 using a pencil and paper. Under the process of the Sieve of Eratosthenes, all integers which are not prime numbers are removed from the list.

What is the last integer removed from the list?

49 ✔ **Answer:** 49

49

*You have used 1 of 2 submissions*

## PROBLEM 6 (1/1 point)

Choose all of Mersenne primes.

- [x] 3 ✔
- [ ] 5
- [x] 7 ✔
- [ ] 11
- [ ] 29
- [x] 31 ✔
- [ ] 37
- [ ] 1,023

✔

*You have used 1 of 2 submissions*