

Math 255 - Spring 2022
The Legendre symbol
15 points

This homework invites you to compute some Legendre symbols.

1. Please compute the following Legendre symbols:

(a) $\left(\frac{19}{23}\right)$

(b) $\left(\frac{-23}{59}\right)$

(c) $\left(\frac{71}{73}\right)$

2. Please compute the following Legendre symbol:

$$\left(\frac{219}{419}\right).$$

Note that 419 is prime, but $219 = 3 \cdot 73$.