Introduction to mathematical cryptography Homework problems Week 1

1. The cipher

DYLOY BXYDD YLODR KDSCD ROAEO CDSYX

is encrypted by the Caesar cipher. Decrypt it.

2. Using the euclidean algorithm, compute gcd(140251, 173611). Also, write the greatest common divisor as the integer combination of 140251 and 173611.

Note: Please, provide complete arguments everywhere, and explain how you arrived at your answer/solution. Giving the result without explanation leads to score deduction.