1. (a) Use the Euclidean Algorithm to find the GCD of the numbers 403 and 341.

- (b) Use this result to reduce the fraction $\frac{403}{341}$.
- (c) Use the result of part (a) to find a solution of the Diophantive equation 403x + 341y = 31.

(d) Find formulas which give \underline{all} solutions of the equation of part (c).