Exercise sheet 3

1. Find the greatest common divisor

a) $\gcd(496, 207)$,   b) $\gcd(874, 667)$.

2. Decide, whether the following equation has an integer solution

a) $x + y = 1$,   b) $81x + 17y = 4$,   c) $4x = 6y - 7$.

3. Find all integer solutions of the following equation

a) $10x + 14y = 32$,   b) $3x + 2y = 5$,   c) $10x + 15y = -3$.