Linear Diophantine Equations

(Extended Euclid)

We know there are infinite points in a straight line.  
An Alexandrian Greek mathematician Diophantus proposed that   
in a line there are some integer solutions.

**A linear Diophantine equation is an equation between two sums of**[**monomials**](https://en.wikipedia.org/wiki/Monomials)**monomials of degree zero or one (wiki)**

* We will use Euclids algorithm to find out the GCD (Greatest Common Divisor)
* After getting the GCD, we will backward substitute the remainder.
* And after certain steps we will be able to reach our given equation.
* Lets solve it for 152x + 60y = 8

Note: There are could be many solutions of a Diophantine Equation.

