Problem 7 (Bonus). Suppose you have 2 pitchers. One pitcher holds exactly 5 pints and the other holds exactly 8 pints. How can you measure exactly 1 pint of water using the two pitchers. (The pitchers don't have any markings on them. Assume that you have a large supply of water and you are allowed to spill water.) What does this problem have to to with greatest common divisors?

(Please show each step of your solution. Thank you.)