Lesson 13

(1) Determine the prime factorization of 212100.

(2) How many positive divisors does 212100 have? You don't have to list them all, just determine how many there are. This isn't difficult using the result of problem 1. See a similar example in the notes.

(3) Find all integer solutions to $14x + 77y = 69$.

(4) Find all integer solutions to $14x + 77y = 70$.

(5) Beth stocked her video store with a number of video game machines at \$79 each, and a number of video games at \$41 each. If she spent a total of \$6358, how many of each item did she purchase?

(6) (bonus) Determine all integer solutions to $5x - 7y = 99$. Watch that minus sign!