A hint regarding Exercise 13.8

Using the notation of the exercise, to show that G/H is isomorphic to **Z** you'll definitely need to appeal to the 1st Isomorphism Theorem.

To that end, you need to construct a function f : G → **Z** that (1) is a homomorphism, (2) is onto, and (3) has exactly H as its kernel.

To construct f, note that everything in H will have to go to 0 in **Z**. To decide where to send the other element of G, start by considering how you'd arithmetically describe the elements of G that are not in H. This may help you to determine a useful function.