Name _____ Quiz 2

1) Let S be a set. Define a relation R on S. Give the three properties below that must be satisfied for R to be an equivalence relation.

2) Solve the equation $[4]_{11}x = [2]_{11}$.

3) Solve the equation. $4x \equiv 2 \bmod 11$.

4) Let m be an odd number. Show that the equation $x^2 \equiv c \bmod m$ has an even number of solutions.