26. Let $g \in G$. What are the possible orders g can have?

We can say that the number of possible orders is given by the number of possible elements in the subgroups.
So, the possible orders are 1, 2, 5, 10, 25, 50

c. If H is a subgroup of G w/ 10 elements, how many equivalence classes of the congruence (mod H) relation are there in G?

With $(H, *)$ as our subgroup, we know that $|H| = 10$, we know from Theorem 42.4 that the equivalence classes of the is congruent to mod H relation all have the same cardinality as H, which we know to be 10.

So, 10 is the number of equivalence classes (mod H)