

Problem 23.41

The charge q_1 has field lines entering it, which means it is a **negative charge** (the direction of an electric field is, by definition, the direction “a positive charge would accelerate if put in the field,” so if the field line is pointing at an object, that object must be negative). As field lines are exiting q_2 , it must be a **positive charge**.

As for the ratio, with 18 lines associated with q_2 and only 6 associated with q_1 , apparently q_2 is 3 times more charged than q_1 .

