Compliance Data Specialist - Homework Assignment

Instructions: Read the situation and answer the following questions for Task 1 and 2. Please explain the steps you took to arrive at each answer (written explanation, loom video, etc.). With the proper formulas/SQL queries, this entire exercise should take no longer than 2 hours to complete. Please send your answers and supporting explanations to the following email addresses: madison@postscript.io, taylar@postscript.io, and tania.smith@postscript.io.

Situation:
You are onboarding a new Postscript customer that wants to bring over their current SMS subscriber list from their prior platform. Immediately prior to Postscript they were using SMS Platform A. Before that, they were using SMS Platform B.

The customer provided the following subscriber list exports:
Subscriber List Export - SMS Platform A.csv
Subscriber List Export - SMS Platform B.csv

We can only maintain the subscribers that 1) are currently opted-in (i.e. not unsubscribed) to receive SMS marketing, and 2) have valid/identifiable opt-in sources.

Hints/Assumptions:
1. For purposes of this exercise, assume that U.S phone numbers comprise of either 8 or 9 digits (8 digits if a leading 1 is excluded, 9 digits if a leading 1 is included). For example, 167893399 and 67893399 should both be considered valid U.S. phone numbers, and should be considered the **same** phone number.
2. Assume that "List Import" is **not** a valid/identifiable opt-in source. All other sources are valid with the following caveat:
   a. **If an opt-in source indicates that it was collected on a different platform, we need to identify the original source of opt-in.** For example, the phone number "121453441" on "Subscriber List Export - SMS Platform A" has an opt-in source of "Collected on SMS Platform B", so we need to identify the opt-in source from "Subscriber List Export - SMS Platform B" which is "Desktop Pop-up".
3. Assume that only phone numbers with a corresponding "Subscribed" status are actually subscribed.

Task #1:

1. How many subscribers from SMS Platform A can be uploaded to Postscript? Break down the subscriber counts by original opt-in sources. Use the following table template:

Opt-in Source	Subscriber Count

2. How many subscribers from the SMS Platform A export can**not** be uploaded to Postscript? Create a table similar to the above and explain why these subscribers cannot be maintained.

Task #2:

1. After you've completed the analysis and uploaded the list based on the criteria above, the customer is concerned that they're missing a bunch of subscribers. We learn that SMS Provider A failed to override the "unsubscribed" status on the list export if subscribers re-opted in (after opting out/unsubscribing) at a later date. How many subscribers have an opt-in date/timestamp that is AFTER the opt-out timestamp?