## **Key Relationship Information**\* (These are all different colors because it helps me visualize relationships)

Cities can have many airports
Passengers can fly on many aircraft
Passengers can live in one city

Aircraft can have many passengers Aircraft can land/take off from many Airports

Airports can only be in one city

\* In my mind this also means that an airport can house many different aircraft - AKA a **many-to-many relationship**, not sure if this line of thinking is correct but it's what I'm going with.

My logic is based on this statement from the docs, under "Many-to-Many" (<a href="https://launchschool.com/books/sql\_first\_edition/read/multi\_tables">https://launchschool.com/books/sql\_first\_edition/read/multi\_tables</a>):

- ---> "Example: A user has many books checked out or may have checked them out in the past. A book has many users that have checked a book out." So, if I convert that logic to work with our air travel case study:
  - ---> An aircraft can take off/land from many airports or may have landed/taken off from them in the past. An airport houses many aircraft that may have landed/taken off. or...
  - ---> An airport can house many aircraft or may have housed them in the past. An aircraft can have many airports that it lands at/takes off from.

