Question 1: post\_id, user\_id\_rating is the combination of column that would make up the primary key.

Question 2:

a)

post\_id → topic\_id

post\_id → topic\_date

post\_id → post\_date

post\_id → topic

post\_id → post

post\_id → category\_id

post\_id → category\_name

post\_id → user\_id\_author

post\_id → username

post\_id → email

post\_id, user\_id\_rating → rating

b)

\*\*Just a heads up the underlining for the primary key columns covers parts of their names like the “\_” character.

Original table before changes:

Table (post\_id, user\_id\_rating, topic\_id, topic\_date, post\_date, topic, post, category\_id, category\_name, user\_id, username, email, rating)

Newly made/changed tables:

New table:

Posts (post\_id, topic\_id, topic\_date, post\_date, topic, post, category\_id, category\_name, user\_id\_author, username, email)

Ratings (user\_id\_rating, post\_id, rating)

Question 3:

a)

post\_id → topic\_id → topic\_date, topic, categoiry\_id

post\_id → category\_id → category\_name

post\_id → user\_id\_author → username, email

b)

New and old tables:

Ratings (user\_id\_rating, post\_id, rating)

Posts (post\_id, topic\_id, post\_date, post, user\_id\_author)

Topics (topic\_id, topic\_date, topic, category\_id)

Categories (category\_id, category\_name)

Users (user\_id\_author, username, email)

4. Yes, they all meet the requirments of Boycee\_Codd normal form. This is because each non-primary key column is determined by the primary key and has no other dependencies with anything else in each table.