# CHAPTER 5 QUIZ

1. What is the first method called in lifecycle of an activity
    a. OnRestoreInstanceState
    b. OnStart
    c. OnResume
    d. OnCreate
2. If the Bundle parameter is non-null in the `OnCreate` method, this indicates which of the following?
    a. The Activity is paused
    b. The Activity is stopped
    c. The Activity is restarting
    d. The Activity is running
3. In which lifecycle callback is the user able to begin interacting with the Activity?
    a. OnResume
    b. OnCreate
    c. OnRestoreInstanceState
    d. OnStart
4. What purpose do the methods in the Android Activity Lifecycle serve?
    a. To keep the current thread in the foreground, regardless of state changes in the background Activities
    b. To allow developers a chance to implement the functionality to handle the state and resource management requirements of their application.
    c. To prevent Android from destroying all Activities if a user navigates backwards using the back button
    d. To enable multi-tasking without changing the state of all involved Activities
5. What purpose does OnRetainNonConfigurationInstance serve?
    a. Nothing. It is deprecated and should not be used.
    b. It is method that can be overridden to allow the developer to prevent the activity from being destroyed when there is a configuration change.
    c. It is an activity lifecycle method that is called between OnStop and OnDestroy.
    d. It is a method that can be overridden to allow the developer to persist state across configuration changes using custom objects instead of the Bundle.
6. What is instance state?
    a. A memory dump of an Activity at a given point during its lifetime.
    b. Extra state information that will be restored when an Activity is recreated.
    c. Data that is passed between two different activities.

    d. A collection of all the data and resources that an Android application is using.
7. What is the recommended approach for retaining state during a runtime configuration change to optimize performance?
    a. Overrride OnRetainNonConfigurationInstance and return a custom object that holds the state. Use that object in OnCreate when initializing the UI to retrieve the data by accessing the LastNonConfigurationInstance property of the activity.
    b. Set the ConfigurationChanges property on the ActivityAttribute, and implement OnConfigurationChange as appropriate.
    c. Override OnSaveInstanceState to save the data to a Bundle, and then override OnRestoreInstanceState to retrieve the data from a Bundle.
    d. Don't do anything. Just let Android handle everything through the lifecycle callbacks.

## Answers

1) D, 2) C, 3) A, 4) B, 5) D, 6) B, 7) A