

1. TDD; not insufferable nit-picker insists 100% coverage
2. Not lazy; only leave out tests hard to write
3. Only most complex parts where bugs most likely uncovered
4. Don't waste time writing test unless minimal value

#### A\_assertNotNull.java

- 1 – What we found in the codebase
- 25 – Bad test
- 50 – Could have driven this
- 75 – Wrapper
- 100 – Good test
- 125 – What we actually drive...but not really
- 150 – Because we could also have driven this
- 175 – Always need a test like this in such cases

#### B\_parameters.java

- 1 – What we want to drive. Explain terms.
- 25 – Penetrable test. Easy, good, unfortunate.
- 50 – Observable test. Excellent.
- 75 – Impenetrable test. Problem.
- 100 – What we want to drive now.
- 125 – How we drive it.

#### C\_missingAssertions.java

- 1 – Bad test: explain onEditorActionListener
- 25 – Good test: extract callback
- 50 – Two separate tests for extracted callback

#### D\_sameValues.java

- 1 – What we want to drive
- 25 – Bad test
- 50 – What we could just as easily have driven: what's bad?
- 75 – Good test

#### E\_otherSideOfIf.java

- 1 – What we want to drive

- 25 – First test
- 50 – How not to write production code
- 75 – Right way to write production code
- 100 – Second test
- 100 – Driven code
- 125 – Alternative—superior—intermediate version
- 150 – Even better intermediate version

#### F\_smartWrapFact.java

- 1 – Annoying collaborator; cannot be constructed in unit test
- 25 – What we want to drive
- 50 – But we need to drive code with a factory
- 75 – ...and everything's cool.
- 100 – But what if we have to do it many places? No.
- 125 – But both the code and the test would be easier.
- 150 – Separation of responsibilities
- 175 – Isolating untestable code allows testing what's testable
- 200 – Example test is trivially different

#### G\_realValues.java

- 1 – Casting: ugh. Explain Android
- 25 – Test-drive a utility method to encapsulate cast
- 50 – Method that was driven. Anything wrong?
- 75 – Use a value that isn't real in the testable
- 100 – Prod code would need to be ridiculous for false positive

#### H\_specifyOnce.java

- 1 – What we're driving
- 25 – Really Bad test
- 50 – Could have driven this
- 75 – Bad test, but one that will fail
- 100 – Good test

#### I\_importantValues.java

- 1 – SALT will be used on stored data in customer devices
- 25 – Accidentally changed into this

50 – If the value is important, write a test

#### J\_unrolled.java

- 1 – POJO full of sensitive data
- 25 – What we're driving
- 50 – Bad test
- 75 – Now we add another field; logout now false positive
- 100 – Better test for reflective language
- 125 – Non-reflective language can use alternate design
- 150 – Same concept for the test

#### K\_classChecks.java

- 1 – Bus events
- 25 – What we want to drive
- 50 – Good success test
- 75 – Bad failure test
- 100 – Could have driven this instead
- 125 – Good failure test

#### L\_quarantine.java

- 1 – What we want to drive
- 25 – Clumsy test
- 50 – Quarantine pattern
- 75 – One hand washes the other

#### M\_noBefore.java

- 1 – Bad test: even with good prod, one will always fail
- 28 – Good test: mock created in @Before

#### N\_tooManyMock.java – Mockito specific

- 1 – What we want to drive
- 25 – Bad test: explain @Mock, @InjectMocks, and injectMocks
- 50 – Could have driven this instead
- 75 – Can't use @Mock on generated instance fields

#### O\_anyClass.java – Mockito specific

- 1 – What we want to drive
- 25 – Bad tests: always pass
- 51 – Could have driven this instead
- 75 – Good test
- 100 – Better design
- 125 – Easier test