**Session 23: Post class test solutions**

1. **d. A non-viable patent with 12 years to expiration in a risky business**. The option premium over the DCF value is greatest when an option is on a risky underlying asset, has a long time to expiration and is out of the money.
2. **c. $1,141 million.** It is the present value of $150 million for 15 years, using the cost of capital of 10% as your discount rate.
3. **a. Lower the value**: It will be negative for two reasons. The first is that your cash flows will be lower, if you have competition and the second is that your option life will be reduced to 5 years.
4. **e. All of the above.** Any of the approaches can be used, though each comes with its own baggage. The standard deviations from publicly traded companies may not be reflective of the risk in the projects that these companies take. The simulation is only as good as the distributions used to derive the results.