Homework 3 for Delta and Gamma

If a call has a 70 delta, what is the delta of the corresponding put on that strike?

1. 30 delta
2. 40 delta
3. -30 delta
4. unknown

As IV increases what happens to deltas of different strike prices?

1. They all head toward 50 or -50 depending on call or puts
2. They all increase
3. They all decrease
4. ATM delta does not change
5. A and D

As time passes does gamma increase or decrease?

1. Gamma at the money decreases
2. Gamma just out of the money decreases
3. Gamma at the money increases
4. Gamma does not change

If a position has a positive delta what will be the sign of the gamma?

1. Long
2. Short
3. Flat
4. Undetermined

What type of gamma will a short put have?

1. Long
2. Short
3. Flat
4. Undetermined

What type of delta will a long call have?

1. Long
2. Short
3. Flat
4. Undetermined

A position has a delta of +500 and a gamma of +100, the underlying drops 8 dollars, what is the positions net delta?

1. Long 100 deltas
2. Long 200 deltas
3. Short 200 deltas
4. Short 300 deltas

As the underlying rallies what direction will a position’s delta move if the position is long gamma?

1. Get flatter delta
2. Get longer delta
3. Get short delta
4. Undetermined

A position has a delta of 200 and a gamma of -100, if the underlying rallies 3 points, what will the new delta be?

1. Long 100 deltas
2. Long 200 deltas
3. Short 100 deltas
4. Short 200 deltas

Why do stocks with higher prices have smaller gammas?

1. That is not true
2. Higher prices mean nothing to gamma
3. Gamma is price weighted like delta
4. Gamma is not price weighted

What effect will cost of carry have on call delta?

1. Cost of Carry has no effect
2. Interest rates can change the value of delta
3. Dividends can change the value of delta
4. B and C

The further to expiration, the more all strikes will have the same delta. Why?

1. The option model fails as time to expiration increases
2. Events become more certain with the passage of time
3. The probabilities of certain outcomes tend toward 50% as time to expiration increases
4. Options tend to move toward their Moneyness as time to expiration increases , so the statement is false