A hedge fund has investments in exactly seven stocks–P, Q, R, U, V, W and X. In September, each stock's value either goes up or goes down. The following conditions apply in September:

> If X goes up in value, P and W go down. If R goes up in value, then U goes down. Of Q and V, exactly one stock goes up. Of R and W, exactly one stock goes down. If U does not go up in value, neither does V.

- 1. Which one of the following could be a complete and accurate list of the stocks which go up in value in September?
- A. U, Q, V
- B. R, X, V
- C. P, W, Q
- D. U, W, Q, V
- E. R, U, P, Q
- 2. What is the maximum number of stocks which could go up in value in September?
- A. two
- B. three
- C. four
- D. five
- E. six

- 3. Which one of the following is a pair of stocks which both CANNOT go up in value in September?
- $A. \ \ R \ and \ V$
- $B. \quad U \text{ and } Q$
- C. Q and X
- D. W and P
- E. P and Q
- 4. If Q and P both go up in value in September, then which one of the following could be true of the value of the stocks in September?
- A. Both V and W go up in value.
- B. Both W and X go down in value.
- C. Both U and V go up in value.
- D. Both R and W go down in value.
- E. Both R and X go up in value.
- 5. If R goes up in value in September, which one of the following also could be true in September?
- A. P goes up in value.
- B. V goes up in value.
- C. U goes up in value.
- D. Q goes down in value.
- E. W goes up in value.

## Game 16 - Hedge Fund

- 1. C 2. C 3. A
- 4. B
- 5. A

Question 1 is the standard first testing of the rules–all of the four incorrect answers break a rule. Question 2 is a minimum and maximum list question, and you need to look for and draw inferences from rules that say two things can't both be together. For example, you can't have X along with P and W, and you can't have both Q and V. You'll find that if you take the sides with the larger elements, you'll get a maximum of four stocks going up–P, W, U, and either Q or V but not both.

Remember that on a question like Question 3; usually the answer will require an inference from the rules. (In other words, when it asks what cannot be true, it will usually not simply be an answer which directly breaks a rule, but rather which by way of inference will violate the rules) In Question 3, the inference is that if R goes up in value, U goes down, which means V cannot go up under the last rule.

On Question 4, you can deduce that X and V must both go down in value, since if X went up, P would go down, and between Q and V, one goes up in value. This eliminates every answer but B.

For Question 5, if R goes up, U and W must go down, which means that V must go down and Q must go up. This excludes four of the answers.