NOTE: THIS EXERCISE IN NO WAY CONDONES PET MICROWAVING!

After his forced retirement, former Secretary of Defense Donald Rumsfeld, "Rummy," spends much of his time luring neighborhood cats into an industrial-sized microwave oven, which he procured for the purpose. In one particularly murderous period, he was able to "nuke" exactly one kitty-cat every day for a week, starting on Sunday. Two of the cats were females: Catie and Darling. The others were males: Freddie, Garfield, Heathcliff, Snowball and Tigger.

The following rules apply:

Freddie was nuked sometime before Darling. Rummy's first victim was a female. Exactly two cats were nuked between the two females. Tigger was not killed either on Thursday or Saturday.

- 1. Which one of the following is a possible sequence in which the cats were killed?
- A) Catie, Heathcliff, Freddie, Darling, Tigger, Snowball, Garfield.
- B) Tigger, Catie, Freddie, Garfield, Darling, Snowball, Heathcliff.
- C) Catie, Tigger, Freddie, Darling, Snowball, Heathcliff, Garfield.
- D) Catie, Freddie, Darling, Garfield, Heathcliff, Snowball, Tigger.
- E) Darling, Heathcliff, Snowball, Catie, Garfield, Tigger, Freddie.
- 2. Which of the following must be false?
- A) Rummy killed Garfield on Monday and Tigger on Friday.
- B) Freddie was dispatched on Tuesday and Snowball on Friday.
- C) Heathcliff went on Monday, but Tigger did not go on Tuesday.
- D) Snowball got nuked on Monday, but Tigger did not get nuked on Friday.
- E) Rummy killed Garfield and Heathcliff on consecutive days.
- 3. If Rummy nuked Snowball on Tuesday, then which of the following must be true?
- A) Heathcliff was killed on Saturday.
- B) Catie was killed exactly four days before Garfield.
- C) Tigger met his end after Heathcliff did.
- D) Thursday was the only day on which Garfield could have been killed.
- E) Garfield and Tigger were killed on consecutive days.
- 4. What is the maximum possible number of days separating the deaths of Tigger and Heathcliff?
- A) 2
- B) 3
- C) 4
- D) 5
- E) 6

- 5. Assuming that the first cat that Rummy killed was NOT a female, what was the latest day on which Catie could have died?
- A) Monday
- A) MondayB) WednesdayC) ThursdayD) FridayE) Saturday

Answers and explanations:

1. C

A violates the fourth rule; **B** violates the second rule; **D** violates the third and fourth rules; **E** violates the first rule. By process of elimination, we can determine that **C** is correct.

2. D

D cannot be true because Tigger must have been killed by Rummy on one of three days: Monday, Tuesday or Friday. If it did not happen on Friday, then it must have happened on Monday or Tuesday, and if Snowball took the Monday slot, then the only day left for Tigger would be Tuesday. However, that is impossible since Freddie must have been killed before Darling did, on Wednesday, thus cramming both him and Tigger on Tuesday. All the other answer choices could be true and are incorrect.

3. E

We know that Freddie could only have died on Monday or Tuesday, so if Snowball was killed on Tuesday, Freddie was surely dispatched on Monday. Moreover, this leaves Friday as the only possible day for Tigger, and Thursday and Saturday as the only days for Garfield and Heathcliff, not necessarily in that order. This means that **A** and **D** are incorrect because they may or may not be true, but more importantly, it means that **E** must be true. **B** is not correct because Catie was killed exactly four days before Garfield *or* Heathcliff. **C**, likewise, may be true, though not necessarily so.

4. D

The following scheme violates no rule and shows Tigger and Heathcliff as being five days apart. Therefore, \mathbf{D} is correct.

С	Т	F	D	G/S	G/S	Н
Su	М	Tu	W	Th	F	Sa

5. E

The following scheme is one possibility that violates no rule, except the one that was suspended for this particular question. E is the correct answer.

Т	F	S	D	G	Н	С
Su	М	Tu	W	Th	F	Sa