19

**LOGIC** 

2007B

- 5. In a certain land, all Arogs are Brafs, all Crups are Brafs, all Dramps are Arogs, and all Crups are Dramps. Which of the following statements is implied by these facts?
  - (A) All Dramps are Brafs and are Crups.
  - (B) All Brafs are Crups and are Dramps.
  - (C) All Arogs are Crups and are Dramps.
  - (D) All Crups are Arogs and are Brafs.
  - (E) All Arogs are Dramps and some Arogs may not be Crups.

2015B

- 5. David, Hikmet, Jack, Marta, Rand, and Todd were in a 12-person race with 6 other people. Rand finished 6 places ahead of Hikmet. Marta finished 1 place behind Jack. David finished 2 places behind Hikmet. Jack finished 2 places behind Todd. Todd finished 1 place behind Rand. Marta finished in 6th place. Who finished in 8th place?
  - (A) David (B) Hikmet (C) Jack (D) Rand (E) Todd

2018A

- 5. Alice, Bob, and Charlie were on a hike and were wondering how far away the nearest town was. When Alice said, "We are at least 6 miles away," Bob replied, "We are at most 5 miles away." Charlie then remarked, "Actually the nearest town is at most 4 miles away." It turned out that none of the three statements was true. Let d be the distance in miles to the nearest town. Which of the following intervals is the set of all possible values of d?
  - (A) (0,4) (B) (4,5) (C) (4,6) (D) (5,6) (E)  $(5,\infty)$