1. Which is true?

   (1) $\overline{A} = A \cup A^\circ$
   (2) $\overline{A \cup B} = \overline{A} \cup \overline{B}$
   (3) If $A \subset B$ then $\overline{B} \subset \overline{A}$
   (4) $A \cup A'$ is an open set.

2. Which is true?

   (1) $\overline{A} = A \cup A^\circ$
   (2) If $A \subset B$ then $\overline{B} \subset \overline{A}$
   (3) $\overline{A \cup B} = \overline{A} \cup \overline{B}$
   (4) $A \cup A'$ is an open set.

3. Which is true?

   (1) $A\bar{C}C = A \cup A^\circ$
   (2) If $A \subset B$ then $B\bar{C}DE \subset \bar{A}$
   (3) $AC\bar{C} \cup B = \bar{A} \cup B\bar{C}C$
   (4) $A \cup A'$ is an open set.