Given this ambiguous heap, answer the following:

1. If c > z and c < u, then which of the following may be true? (Select all that apply)
   a. The heap is a min-heap
   b. The heap is a max-heap
   c. Not enough information
2. If c > z and c > d, then which of the following may be true? (Select all that apply)
   a. The heap is a min-heap
   b. The heap is a max-heap
   c. Not enough information
3. If this heap is a min-heap, then which of the following may be true? (Select all that apply)
   a. $a > u$
   b. $a < u$
   c. $a = u$
4. If this heap is a max-heap, then which of the following may be true? (Select all that apply)
   a. $n > k$
   b. $n < k$
   c. $n = k$

Answers:

1-b

2-c

3- b and c

4-a, b and c