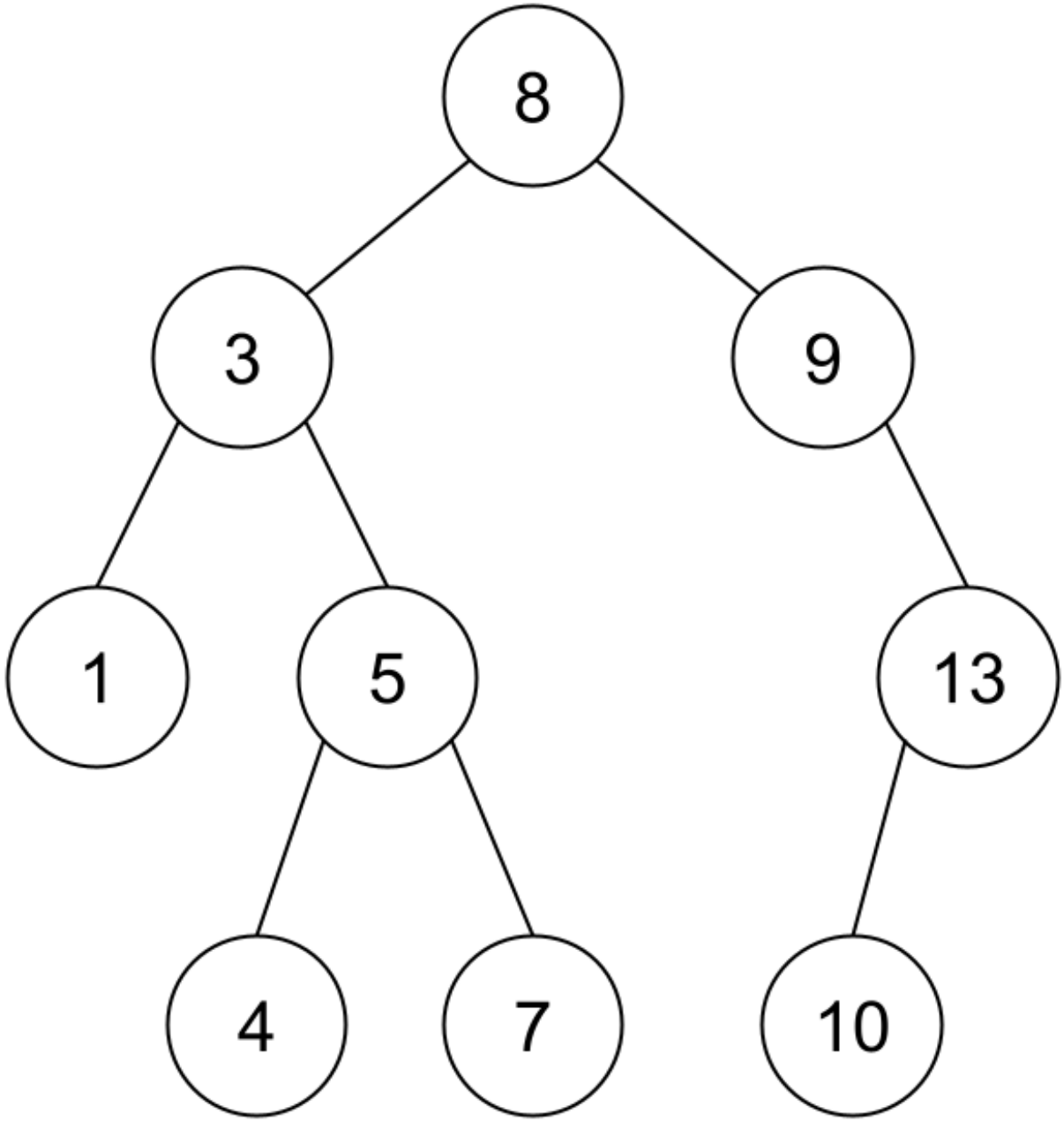
Week 9 Quiz

Q1.

Consider the following binary search tree:



Say that we wanted to delete the 5 node. Using the deletion algorithm presented in the lessons, which node would replace the 5?

A. 3

B. 4

C. 7

D. 8

Q2.

The efficiency of summing all of the keys in a "regular" (non-search) binary tree is `O(n)`, since the algorithm needs to visit every node. What is the efficiency of summing all of the keys of a binary search tree?

A. `O(1)`

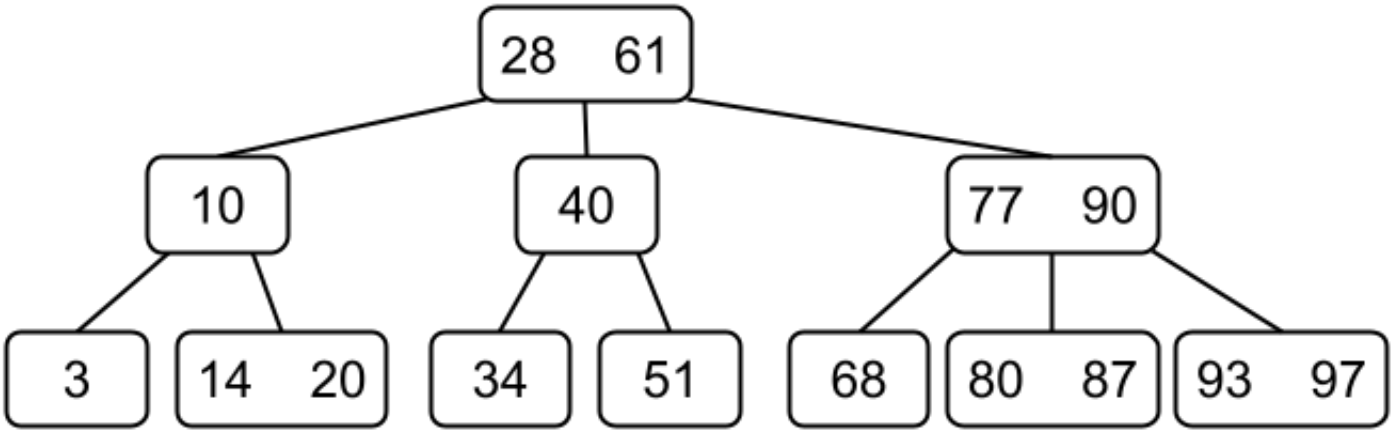
B. `O(logn)`

C. `O(n)`

D. `O(nlogn)`

Q3.

Consider the following 2-3 tree:



Which of the following keys would *not* cause a split to occur when inserted?

A. 9

B. 17

C. 85

D. 92