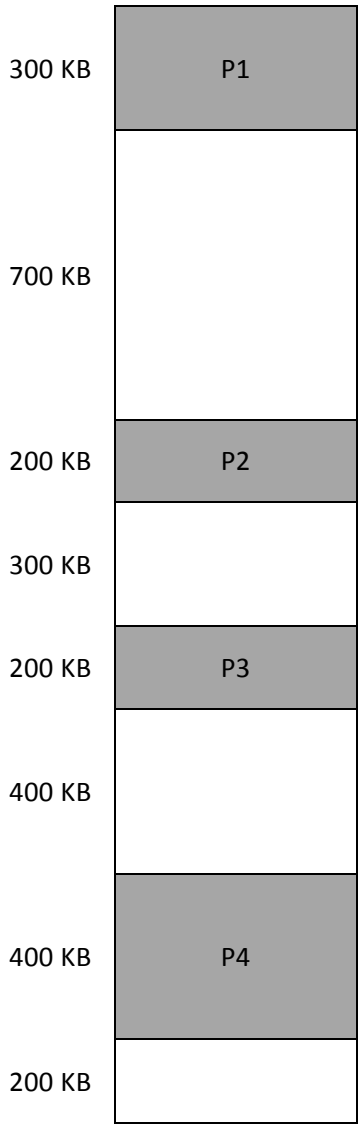
Quiz 5

CMPS 405: Operating Systems

Name:

ID:

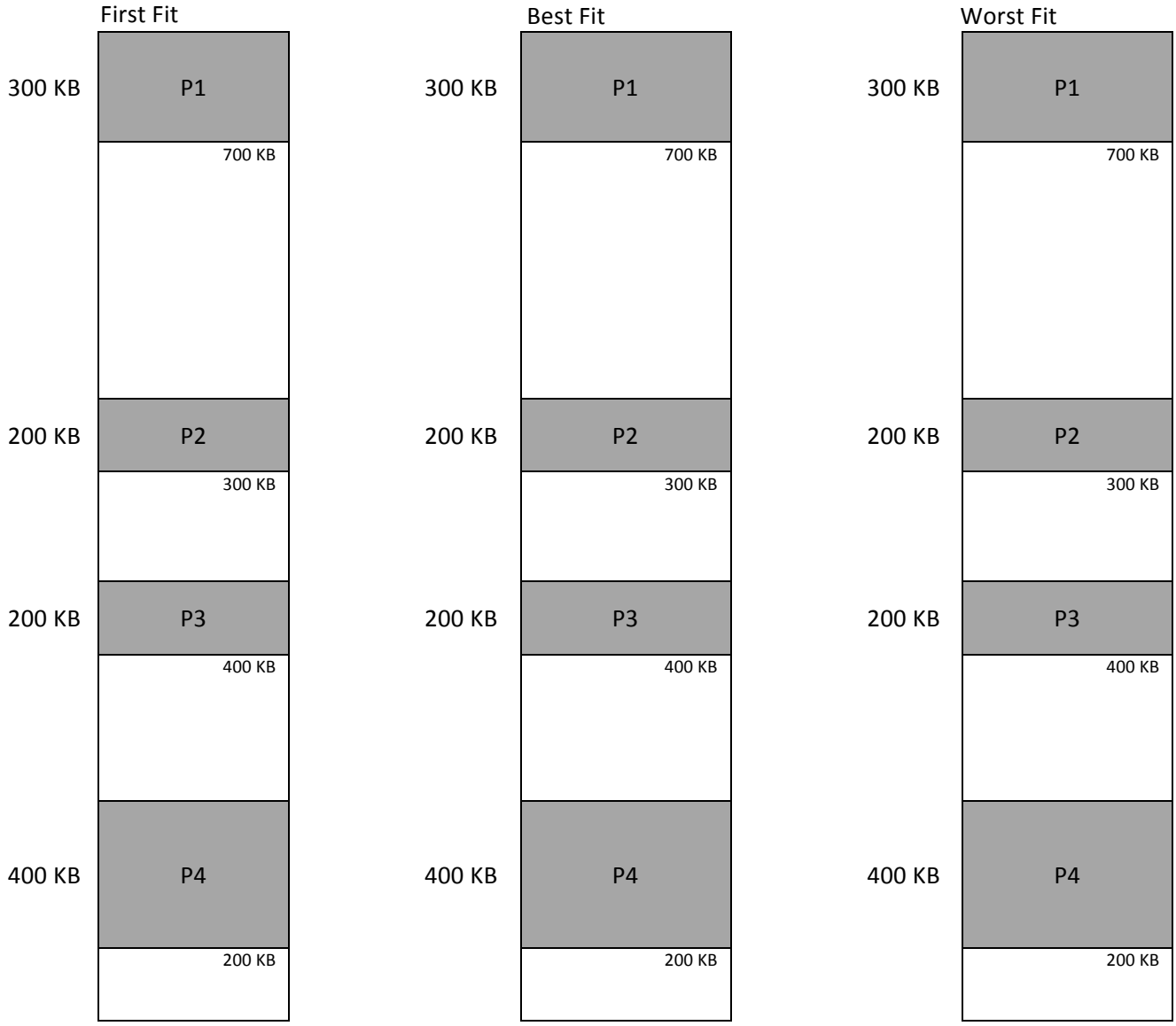
Imagine a system that requires processes to be allocated contiguously in memory. Consider the following state of memory, where grey areas are full and white areas are empty:



Imagine that the follow events occur, in order:
P5 (size 150 KB) arrives, P6 (size 500 KB), P7 (size 190 KB KB) arrives, and P8 (size 350 KB) arrives.

Part (a)

Draw the final state of memory for each of the following allocation strategies. Make sure to draw each process in its correct location and label the sizes of all memory allocations. (Similar to the layout given on the first page.)



Part (b)

Which algorithm causes the least amount of external fragmentation? Justify your answer by explaining why you think so.