Name _____

Consider a demand paged virtual memory system with 3 frames allocated to a process that makes the following sequence of page references: 1 2 3 4 2 5 2 3 2 1 2 5 2 1

Assume that initially no frames are allocated to any pages. For each of the following page replacement algorithms, indicate which pages are in memory after each reference and determine which references produce page faults. Circle the page faults. For each algorithm, also give the total number of page faults. Put your answers on the sheet provided.

a) FIFO b) LRU c) Optimal

d) Second Chance (mark the reference bit with an asterisk)

Put your answers below.

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a)FIFO, Number of page faults =

page reference	1	2	3	4	2	5	2	3	2	1	2	5	2	1
in memory														
in memory														
in memory														

b) LRU, Number of page faults =

page reference	1	2	3	4	2	5	2	3	2	1	2	5	2	1
in memory														
in memory														
in memory														

c) Optimal, Number of page faults =

page reference	1	2	3	4	2	5	2	3	2	1	2	5	2	1
in memory														
in memory														
in memory														

d) Second Chance, Number of page faults =

page reference	1	2	3	4	2	5	2	3	2	1	2	5	2	1
in memory														
in memory														
in memory														