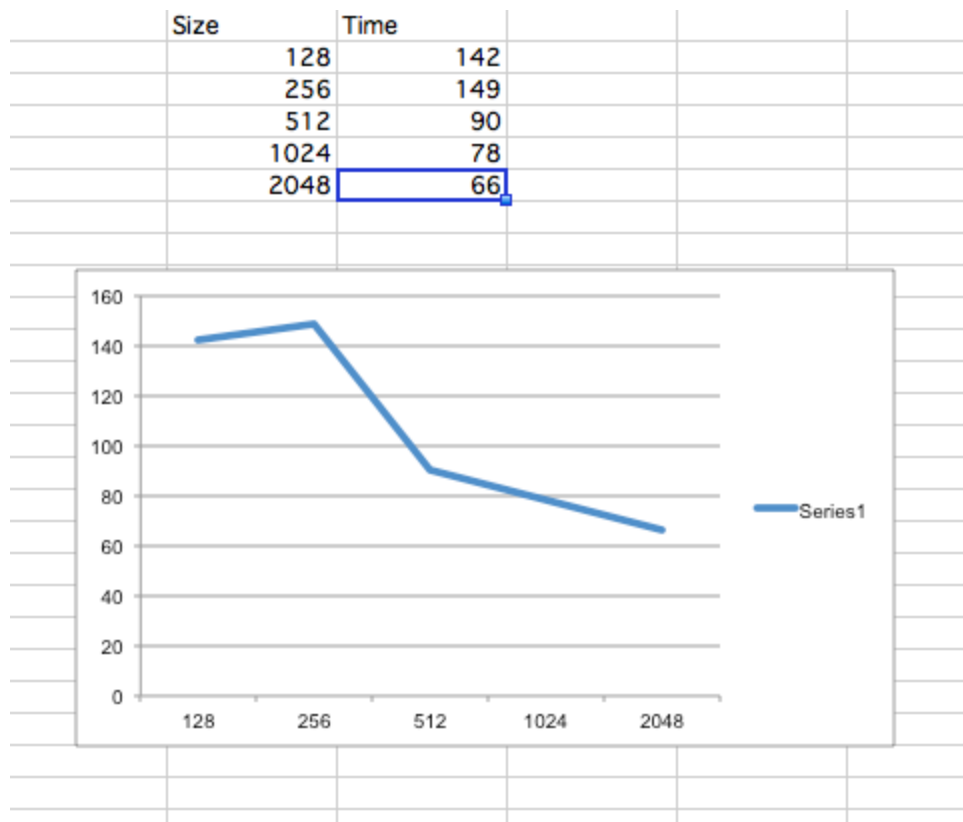


OX Ex1

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PART 2

1. Graph



2. The graph is not a straight line because as the buffer size is smaller, the number of requests goes up, meaning the number of system calls. System calls has a non-negligible speed that at small buffer sizes add up.
3. Yes, adding a print action acts as an additional system call and will add to the overall time.

PART 3:

1. False - a simple Hello world is a system print action that uses the stdout functions.
2. True - any keypress is an action on the stdin system call
3. False - it's the other way around

4. False - any program in user mode may request system calls from the CPU.
5. False - all programs runs in user mode.
6. True
7. False - a program run on VM would have an equal or lower speed. This is because there are more layers in the way of the original OS which actually runs the code at the end
8. False - any program in usermode can request a system call such as reading from CD-ROM
9. False - every system call takes time and every time there's a context switch cost which needs to be taken into account
10. True - they may request access through system calls