

CSCI-342 Operating Systems
Quiz 2
Chapter 8.4 Process Control

Name _____

1. What is the name of the system call that returns the pid of the current process?
2. What is the name of the system call that returns the pid of the current process' parent process?
3. What is the name of the function that is used to terminate a process?
4. What system call creates a new running child process?
5. What prints to stdout in the following program?

```
int main() {
    int x = 1;
    pid_t pid = fork();

    if (pid == 0) {
        x++;
        printf("value of x in child: %d\n", x);
        exit(0);
    }
    x--;
    printf("value of x in parent: %d\n", x);
    return 0;
}
```

6. Draw the process graph for the following code.

```
int main() {
    fork();
    fork();
    printf("hello\n");
    exit(0);
}
```

7. What prints to stdout in the following program?

```
int main() {
    int x = 1;
    if (fork() == 0) {
        printf("p1: x = %d\n", ++x);
    }
    printf("p2: x = %d\n", --x);
    exit(0);
}
```

8. What do you call a process that has terminated but which has not been removed by the kernel.