

ECE 429 / 629 Homework #7

1. Consider the following code. Assume add takes 2 clock cycles, multiply takes 10, and divide takes 40. Using the scoreboard diagram (separate),

```
LD      F2, 21(R1)
ADDD    F0, F2, F4
MULTD   F8, F2, F3
DIVD    F3, F4, F2
ADDD    F9, F3, F4
SUBD    F9, F1, F2
```

- a. Fill in the scoreboard instruction status with the clock cycle number
- b. Fill in the scoreboard functional unit status and register result status with their values at clock cycle 5