

## Assignment 10

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### Problem 1:

$$\begin{aligned} \text{6.3.1 (a)} \quad & 11.0 \text{ ms} + \frac{0.5 \text{ rotation}}{7,200 \text{ RPM}} + \frac{1 \text{ KB}}{34 \text{ MBytes/sec}} + \frac{1 \text{K B}}{480 \text{Mbits/sec}} \approx 15.1975 \text{ ms} \\ \text{(b)} \quad & 9.0 \text{ ms} + \frac{0.5 \text{ rotation}}{7,200 \text{ RPM}} + \frac{1 \text{ KB}}{30 \text{ MBytes/sec}} + \frac{1 \text{KB}}{500 \text{ Mbits/sec}} \approx 13.2013 \text{ ms} \end{aligned} \quad (1)$$

$$\begin{aligned} \text{6.3.2 (a)} \quad & 11.0 \text{ ms} + \frac{0.5 \text{ rotation}}{7,200 \text{ RPM}} + \frac{2 \text{ KB}}{34 \text{ MB}} \approx 15.2241 \text{ ms} \\ \text{(b)} \quad & 9.0 \text{ ms} + \frac{0.5 \text{ rotation}}{7,200 \text{ RPM}} + \frac{2 \text{ KB}}{30 \text{ MB}} \approx 13.2318 \text{ ms} \end{aligned} \quad (2)$$

6.3.3

### Problem 2:

$$\text{6.6.1 (a)} \quad \frac{1 \text{ KB}}{34 \text{ MB}} \approx 0.0287224 \text{ ms} \quad (3)$$

$$\text{(b)} \quad \frac{1 \text{ KB}}{30 \text{ MB}} \approx 0.0325520 \text{ ms}$$

$$\text{6.6.2 (a)} \quad \frac{0.5 \text{ KB}}{34 \text{ MB}} \approx 0.014361 \text{ ms} \quad (4)$$

$$\text{(b)} \quad \frac{0.5 \text{ KB}}{30 \text{ MB}} \approx 0.016276 \text{ ms}$$

6.6.3

### Problem 3:

3-A

3-B

3-C

3-D

### Problem 4:

7.6.1

7.6.2

7.6.3

### Problem 5: