Chapter 6

3, 6, 7, 8 (a-c), 10, 11

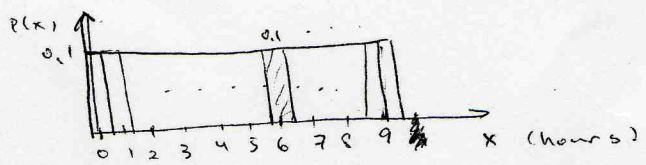
Chapter 7

1, 2, 8, 9.

#3

(6.3) $p(x)$ = pop. dist.

a)

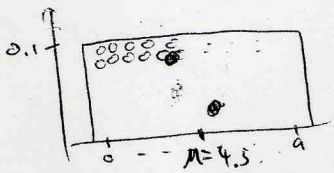


Hours x	Freq.	Relative Freq
0	1000	1000/10000 = 0.1
1	1000	0.1
2	⋮	⋮
3	⋮	⋮
⋮	⋮	⋮
9	1000	0.1
	10000	1

b) one adult = 1st digit from table I = (39).

1st five from table II = 39, 65, 76, 45, 85. $\Rightarrow \bar{x} = 54$

p. 767



c) $\mu = 4.5 = \Sigma x p(x)$

d) $\bar{x} =$ _____

$\bar{x}$ is indeed closer to μ than many of the individual observations.

Yes, this illustrate equation (6.2)

(6.6) $\mu = 10{,}000$

$\sigma = 8{,}000$

$n = 100$

a) $SE = \frac{\sigma}{\sqrt{n}} = \frac{8000}{\sqrt{100}} = 800$

b) Same as a) since $SE = \frac{\sigma}{\sqrt{n}} = \frac{8000}{\sqrt{100}} = 800$.

(6.7)

a) $SE =$ [illegible] $= \$9$

$SE = \frac{\sigma}{\sqrt{n}} = \frac{8000}{\sqrt{789{,}000}} = 9.038$

b) $SE =$ [illegible] $\$29$

$SE = \frac{\sigma}{\sqrt{n}} = \frac{8000}{\sqrt{\frac{789{,}000}{10}}} = 28.645$

$\frac{1}{10}$ as large

1 8/9