Assign p. 568 #1, 2
p. 577 #9, 10

Section 9.1

p. 568

(1) a) parameter $\mu = 2.5003$
statistic $\bar{x} = 2.5009$

b) statistic $\hat{p} = 7.2\%$

(2) a) statistic $\hat{p} = 48\%$
parameter $p = 52\%$

b) statistic $\bar{x}_{control} = 335$
$\bar{x}_{experimental} = 289$

(9) a) pop $\geq$ 10(sample) — spread will be ≈ same for all states

$240{,}000 \geq 10(2000)$
smallest sample size

b) Yes it will change.

1% of Wyoming ≈ sample size
$(.01)(240{,}000) \approx 2000$

1% of California > sample size
$(.01)(15{,}000{,}000) > 2000$

Variability decreases because larger sample size: $s = \frac{\sigma}{\sqrt{n}}$

p.578

(10) Bias - sample mean in relation to center

Variability - describes spread of distribution

a) Large Bias — Large Variability
b) Small Bias — Small Variability
c) Small Bias — Large Variability
d) Large Bias — Small Variability