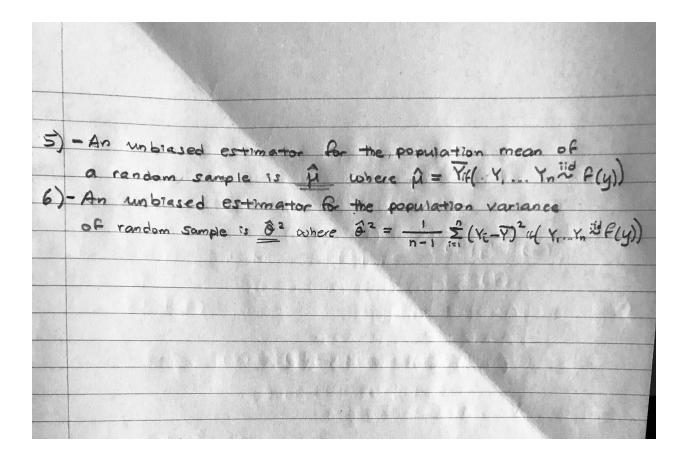
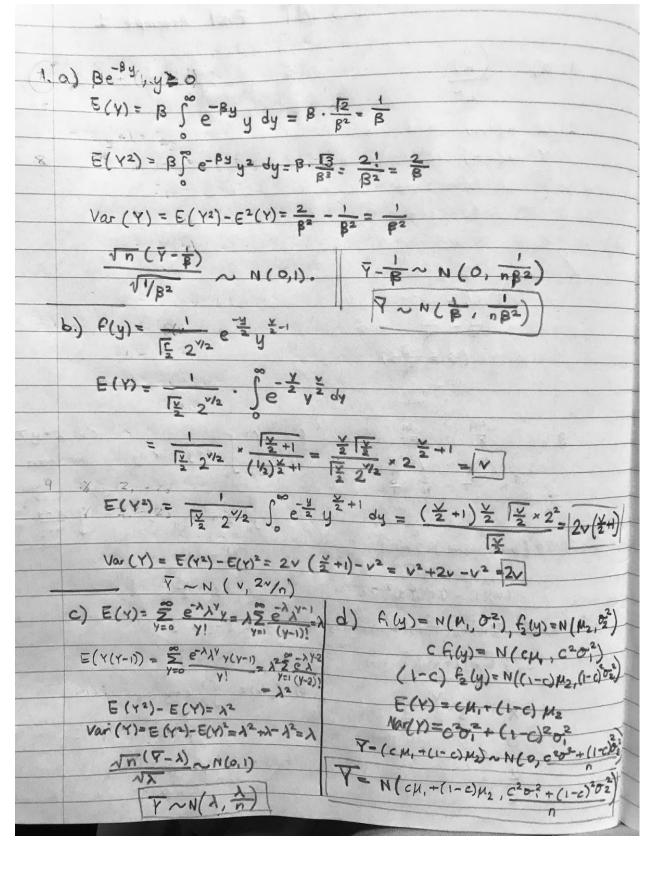
PSTAT 1208 HW #3

	Reading Outline
1)	- An estimetor is a rule, often expressed as a formula, that tells
	how to calculate the value of an estimate based on the
	measurements contained in the sample
	- An experimenter who wants an interval estimate of a parameter
	must use the sample data to calculate two values, chosen so that
18	the interval formed by the two values includes the target
	parameter with a specified probability
2)	- A point estimation produces a guess for the exact value
	of the target parameter.
	- An interval estimation produces a range of possible values
	for the target parameter.
	- One way to view this is that a point estimate involves
	a single numerical value, while an interval estimate is a
	range of numbers.
3)	- Bias is what quantities how far an estimator is
	the term the target parameter
	The bias of an estimator is B(a) = E(a-a) which show
	orresence between the estimators expensed value
13	THE VALUE OF the to
7	o quare error is a Ruse on a Charter Vaciones
	avent Girc -the
	The target passes
	(a) = F(a-8) = var.
	- MSE = Var(8) + (\$(8))2





2) a)
$$X = \frac{1}{m} \sum_{|x|}^{m} x_{1}$$

$$\begin{bmatrix} X \end{bmatrix} = \frac{1}{m} \sum_{|x|}^{m} X_{1}
\end{bmatrix}$$

$$= \frac{1}{m} \sum_{|x|}^{m} M_{1}$$

$$= \frac{1}{m^{2}} \sum_{|x|}^{m} X_{1}$$

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$$= \frac{1}{m^{2}} \sum_{|x|}^{m} X_{1}$$

$$= \frac{1}{m^{2}} \sum_{|x|}^{m} X_{2}$$

$$= \frac{$$

4)
$$\hat{\theta} - \theta = \hat{\theta} - E(\hat{\theta}) + E(\hat{\theta}) - \theta$$

$$= [\hat{\theta} - E(\hat{\theta})] + [E(\hat{\theta}) - \theta]$$

$$= [8 - E(\hat{\theta})] + B[\hat{\theta}]$$

$$MSE(\hat{\theta}) = E(\hat{\theta} - \theta)^{2}$$

$$= E((\hat{\theta} - E(\hat{\theta})) + B(\hat{\theta}))^{2}$$

$$= E((\hat{\theta} - E(\hat{\theta})) + B(\hat{\theta}))^{2}$$

$$= V(\hat{\theta}) + 2[E(\hat{\theta}) - E(\hat{\theta})] B(\hat{\theta}) + B(\hat{\theta})]^{2}$$

$$= V(\hat{\theta}) + 2[E(\hat{\theta}) - E(\hat{\theta})] B(\hat{\theta}) + B(\hat{\theta})]^{2}$$

$$= V(\hat{\theta}) + 0 + [B(\hat{\theta})]^{2}$$

$$= V(\hat{\theta}) - 0 + [B(\hat{\theta})] + B(\hat{\theta}) + B(\hat{\theta})$$