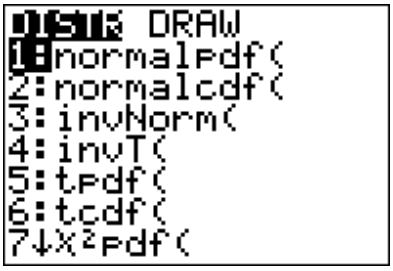
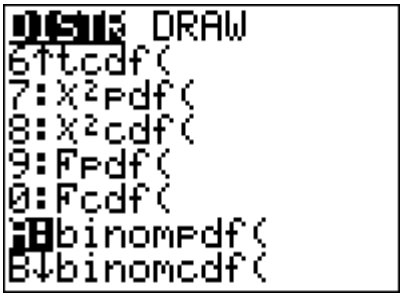
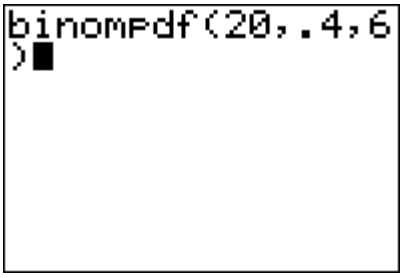
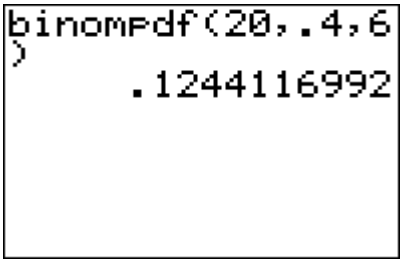
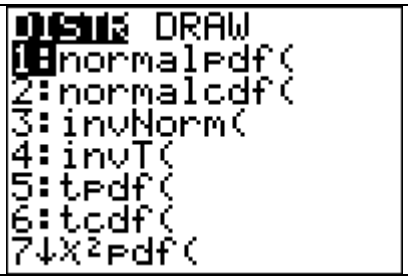
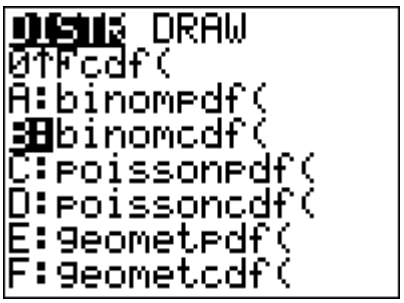
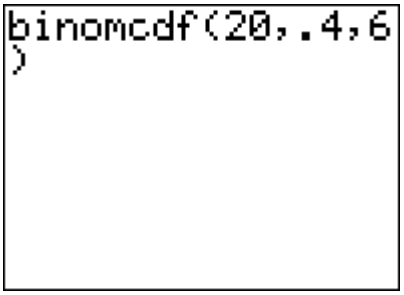
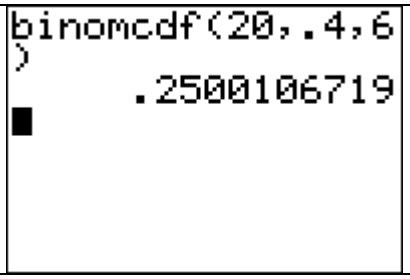
TI Instructions

How to find probabilities of Binomial Distribution:

Given: $p = .4$ **and** $n = 20$, **Find** $P(x = 6)$

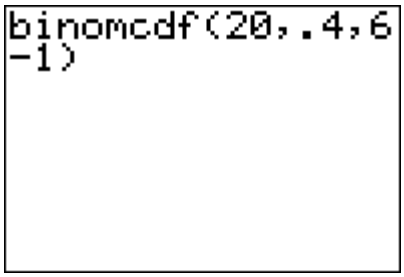
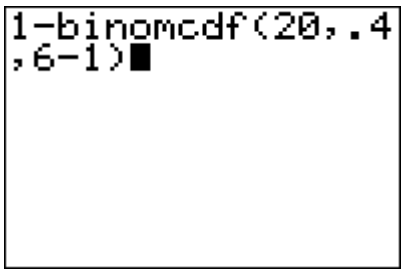
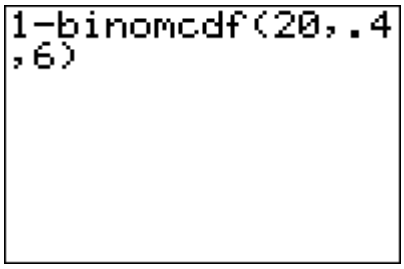
Steps	Instructions	Screen Shots
1	Press **2nd VARS**	
2	Now arrow down to **A: binompdf(,** then press **ENTER** to select This feature may appear as **0: binompdf(** in some calculator.	
3	Now enter the values for n, p, and X. Make sure to separate them by **,** which is located directly above number 7 and close the expression by $)$ which is directly above number 9.	
4	Press **ENTER** to complete the calculation.	

Given: $p = .4$ **and** $n = 20$, **Find** $P(x \leq 6)$

Steps	Instructions	Screen Shots
1	Press **2nd VARS**	
2	Now arrow down to **B: binomcdf(**, then press **ENTER** to select This feature may appear as **A: binomcdf(** in some calculator.	
3	Now enter the values for n, p, and X. Make sure to separate them by **,** which is located directly above number 7 and close the expression by $)$ which is directly above number 9.	
4	Press **ENTER** to complete the calculation.	

You can covert these answers to an exact answer whenever possible by pressing MATH, followed by 1 for1: ▶Frac, then ENTER twice.

Given: $p = .4$ **and** $n = 20,$

To Find	You need to do	Screen Shots
$P(x < 6)$	$\text{binomcdf}\,(n, p, x-1)$	
$P(x \geq 6)$	$1 - \text{binompcdf}\,(n, p, x-1)$	
$P(x > 6)$	$1 - \text{binomcdf}\,(n, p, x)$	

Binomial Distribution formula:

$$P(x = r) = {}_nC_r\, p^r q^{n-r}$$

Given: $p = .4$ **and** $n = 20,$ **Find** $P(x = 6)$

$$P(x = 6) = {}_{20}C_6 \bullet (.4)^6 \bullet (.6)^4$$