Classpad Help Series sponsored by Casio Education Australiawww.casioed.net.au474Binomial Distribution CalculationsAuthorCharlie WatsonDate31 January 2010CPM OS03.04.4000

We will calculate binomial probabilities in the Statistics application.

Assume we have an event that will be repeated 8 times with a probability of success of 0.3.

What is the P(x = 5)?

Tap **Calc, Distribution** and then choose **Binomial PD** from the lower drop down menu.

Tap \mathbb{Next} .







¥ х N ≽ list1 list2 list3 1234 al⊧ 1 E 1]= prob 0.0466754 x Numtrial 8 POS 0.3 Back □Help Binomia1PD Û

The probability of 5 successes in the 8 trials is about 0.047.

Tap on the graph \cancel{H} icon in the top left corner of the screen.

The selected column on the histogram represents the calculated binomial probability.

Tap the right cursor key to view other binomial probabilities for this situation.

Now close all windows and return to the lists.

What is the $P(1 \le x \le 3)$?

Tap **Calc, Distribution** and then choose **Binomial CD** from the lower drop down menu.

Tap $\mathbb{Next} \rightarrow$.

Enter the four required values as shown and then tap $\underbrace{||ext|>>}$.

The probability of at least 1 and no more than 3 successes in the 8 trials is about 0.748.

Tap on the graph \cancel{ft} icon in the top left corner of the screen to view the cumulative binomial distribution for these parameters.

Binomial probabilities can also be calculated in the Main application. The method is explained in another help sheet. Please refer to the menu.

 ▼ Zoom Analysis Calc ◆ ⊠

 □

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

 ○

Auto

Deg



÷



