

Chapter 11 / **Example 14**

Calculating binomial probabilities

A courier delivers packages each day of the week.

The probability that the courier delivers the packages by 9.00 am is 0.7.

Construct a probability distribution table for the week and write an expression for the probability that on seven days they deliver the packages before 9.00 am on five occasions.

Assuming $X \sim B(7, 0.7)$

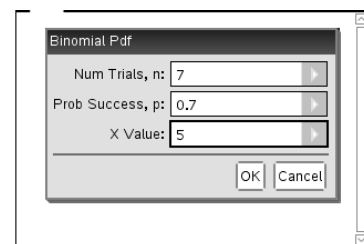
To find $P(X = 5)$

Open a new document and add a Calculator page.

Press **menu** 5:Probability | 5:Distributions | A:Binomial Pdf...

Enter 7 as the number of trials, 0.7 as the probability of success and 5 as the X value.

Press **enter** or click OK with the touchpad.



The GDC displays the solution $P(X = 5) = 0.318$.

