

## Classwork

An office has four copying machines, and the random variable  $X$  measures how many of them are in use at a particular moment in time.

Suppose that

$P(X = 0) = 0.08$ ,  $P(X = 1) = 0.11$ ,  $P(X = 2) = 0.27$ , and  $P(X = 3) = 0.33$ .

(a) What is  $P(X = 4)$ ?

(b) Draw a line graph of the probability mass function.

(c) Construct and plot the cumulative distribution function.