

## Re: Probability with bus..

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"mina\_world" <[mina\\_world@xxxxxxxxxxx](mailto:mina_world@xxxxxxxxxxx)> wrote in message  
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Hello teacher~

A passenger arrives at a bus-stop at some arbitrary point in time.  
Buses arrive according to a uniform distribution on  $[0,1]$ . (Namely, per 1 min.)

What is the mean waiting time until the next bus ?

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I think...

Let  $Y$  be waiting time.

I must find  $E(Y)$ .

If waiting time is  $y$ ,  $P(y) = 1-y$

so,  $E(Y) = \int_0^1 y \cdot (1-y) dy = 1/3$ .

How do you think about it ?

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