

Question #229

Answer: E

Seek g such that $\Pr\left\{\bar{a}_{\overline{T(40)|}} > g\right\} = 0.25$

$\bar{a}_{\overline{T|}}$ is a strictly increasing function of T .

$$\Pr\{T(40) > 60\} = 0.25 \text{ since } {}_{60}p_{40} = \frac{100-40}{120-40} = 0.25$$

$$\therefore \Pr\left\{\bar{a}_{\overline{T(40)|}} > \bar{a}_{\overline{60|}}\right\} = 0.25$$

$$g = \bar{a}_{\overline{60|}} = 19.00$$