

$$p_{X \geq t}(X \geq t+h) = \frac{p((X \geq t+h) \cap (X \geq t))}{p(X \geq t)} = \frac{p(X \geq t+h)}{p(X \geq t)}$$

Donc $p_{X \geq t}(X \geq t+h) = \frac{e^{-\lambda(t+h)}}{e^{-\lambda t}} = e^{-\lambda h} = p(X \geq h).$