

7. 1. The distribution is uniform on $[0, 10]$.

$$\text{Mean is } \frac{10-0}{2} = \boxed{5 \text{ minutes}}$$

$$\begin{aligned} 2. & P(T \geq 6+3 \mid T > 6) \\ &= \frac{P(T \geq 9 \text{ and } T > 6)}{P(T > 6)} \end{aligned}$$

$$= \frac{P(T \geq 9)}{P(T > 6)} = \frac{1/10}{4/10} = \boxed{\frac{1}{4}}$$

3. By the memoryless property, the distribution is Exponential with parameter $1/10$ regardless of when Atsi arrives.

\therefore The average time that Atsi has to wait is $\boxed{10 \text{ minutes}}$