$$X = waiting\ \ time$$

$$X \sim exp(\lambda)$$

$$f(x) = \lambda e^{-\lambda x}$$

We know that:

$$\mathbb{E}(X) = 15\ \ min\ = \int_0^{+\infty} x\lambda e^{-\lambda x} = \frac{1}{\lambda}$$

Then:

$$\lambda = \frac{1}{15}$$

$$F(x) = \int_0^x \frac{1}{15} e^{-\frac{1}{15}x} = 1 - e^{-\frac{1}{15}x}$$

Therefore:

$$P(X > 10) = 1 - P(X \leq 10) = 1 - F(10) = e^{-\frac{2}{3}} = 0.513$$