Den første sandsynlighed kan udregnes således:

$$
\begin{aligned}
P(X \geq 4) &= \left(\frac{1}{2}\right)^5 + \left(\frac{1}{2}\right)^6 + \left(\frac{1}{2}\right)^7 + \dots \\
&= \left(\frac{1}{2}\right)^5 \left(\left(\frac{1}{2}\right)^0 + \left(\frac{1}{2}\right)^1 + \left(\frac{1}{2}\right)^2 + \dots\right) \\
&= \frac{1}{32}\left(\frac{1}{1-\frac{1}{2}}\right) = \frac{1}{16} = 0.0625\,.
\end{aligned}
$$

Alternativt kan man få dette ved at udregne den komplementære sandsynlighed (som er en endelig sum):

$$
P(X < 4) = \left(\frac{1}{2}\right)^1 + \left(\frac{1}{2}\right)^2 + \left(\frac{1}{2}\right)^3 + \left(\frac{1}{2}\right)^4 = \frac{8+4+2+1}{16} = \frac{15}{16}\,.
$$

Den anden sandsynlighed kan udregnes således:

$$
\begin{aligned}
P(X \text{ er et lige tal}) &= P(X \in \{0, 2, 4, 6, \dots\}) \\
&= \left(\frac{1}{2}\right)^1 + \left(\frac{1}{2}\right)^3 + \left(\frac{1}{2}\right)^5 + \left(\frac{1}{2}\right)^7 + \dots \\
&= \frac{1}{2} \times \left(1 + \left(\frac{1}{4}\right)^1 + \left(\frac{1}{4}\right)^2 + \left(\frac{1}{4}\right)^3 + \dots\right) \\
&= \frac{1}{2} \times \frac{1}{1-\frac{1}{4}} = \frac{1}{2} \times \frac{4}{3} = \frac{2}{3} = 0.6667\,.
\end{aligned}
$$