

One Russian engine, three ion engines, and three payloads.
This can be modeled as an integer linear program:

$$\begin{aligned}
& \max 200E1 + 100E2 + 50IE + 25PL \\
& \text{subject to } 400E1 + 400E2 + 150IE + 50PL \leq 1000 \\
& E1 \geq E2 \\
& E1 \leq 1 \\
& E2 \leq 1 \\
& IE \leq 6 \\
& PL \leq 4 \\
& E1, E2, IE, PL \geq 0 \\
& E1, E2, IE, PL \in \mathbb{Z}
\end{aligned}$$

I wrote an Octave program to solve this, *solution.m*. The results are one Russian engine, three ion engines, and 3 fuel payloads for a total discount of 425 days.