62. Making separate free-body diagrams for the helicopter and the truck, one finds there are two forces on the truck ($\vec{T}$ upward, caused by the tension, which we'll think of as that of a single cable, and $m\vec{g}$ downward, where $m = 4500$ kg) and three forces on the helicopter ($\vec{T}$ downward, $\vec{F}_{\rm lift}$ upward, and $M\vec{g}$ downward, where $M = 15000$ kg). With $+y$ upward, then $a = +1.4$ m/s^2 for both the helicopter and the truck.

(a) Newton's law applied to the helicopter and truck separately gives

$$\begin{aligned} F_{\rm lift} - T - Mg &= Ma \\ T - mg &= ma \end{aligned}$$

which we add together to obtain

$$F_{\rm lift} - (M+m)g = (M+m)a \ .$$

From this equation, we find $F_{\rm lift} = 2.2 \times 10^5$ N.

(b) From the truck equation $T - mg = ma$ we obtain $T = 5.0 \times 10^4$ N.