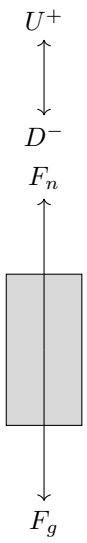
Going down

(1) Givens

$m = 66.678\text{kg}$
$\vec{g} = 9.81\text{m/s}^2[D]$
$\vec{a}_{su} = 0.6\text{m/s}^2[D]$
$\vec{a}_{sd} = 0.8\text{m/s}^2[U]$



(2) Rearrange

$$\Sigma\vec{F} = \vec{F}_{net}$$
$$\vec{F}_{net} = \vec{F}_g + \vec{F}_n$$
$$\vec{F}_g + \vec{F}_n = m\vec{a}$$
$$\vec{F}_n = m\vec{a} - \vec{F}_g$$
$$\vec{F}_n = m\vec{a} - m\vec{g}$$

(3) Solve for speeding up

$\vec{F}_n = m\vec{a} - m\vec{g}$
$\vec{F}_n = (66.678\text{kg})(-0.6\text{m/s}^2) - (66.68\text{kg})(-9.81\text{m/s}^2)$
$\vec{F}_n = (66.678\text{kg})(-0.6\text{m/s}^2) - (-654.13\text{N})$
$\vec{F}_n = (-40.008\text{N}) - (-654.13\text{N})$
$\vec{F}_n = 614.1308\text{N}$

$\boxed{\vec{F}_n = 614.1308\text{N}[U]}$

(4) Solve for slowing down

$\vec{F}_n = m\vec{a} - m\vec{g}$
$\vec{F}_n = (66.678\text{kg})(0.8\text{m/s}^2) - (66.68\text{kg})(-9.81\text{m/s}^2)$
$\vec{F}_n = (66.678\text{kg})(0.8\text{m/s}^2) - (-654.13\text{N})$
$\vec{F}_n = 54.344\text{N} - (-654.13\text{N})$
$\vec{F}_n = 707.474\text{N}$

$\boxed{\vec{F}_n = 707.474\text{N}[U]}$