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g(a): m/s^2 [acceleration] = gravity at altitude
resultant force = thrust - weight acceleration = resultant force (Newtons) / mass (kilograms)
as fuel is burned the rocket becomes lighter
p(t) = position as a function of time p(t)
acceleration(t) = acceleration as a function of time

$$acceleration(t) = rocketthrust - gravity$$

ˆ need to add a function for propellant decreasing:

$$speed(t) = a(t) + speed(t-1)$$

speed is a fold over speed (just like position is a fold over position + speed) but acceleration doesn't contain reference to previous acceleration