A car travel 2m in 2nd second and 6m in next 4 second. what will be distance travel by car in 9th second?

Suppose, the initial speed of the car was $v_0\ m/s$. Then the speed at the time instant t equals:
$v(t) = v_0 + at$
a – acceleration
Distance traveled in the 2nd second equals:

$d_1 = (v_0 + a * 1s)1s + \frac{a(1s)^2}{2} = v_0 + \frac{3}{2}a$

$v_0 + a * 1s$ – speed at the beginning of the 2nd second
Distance traveled in the next 4 seconds equals:

$d_2 = (v_0 + 2s\ a)4s + \frac{a(4s)^2}{2} = 4v_0 + 16a$

$\begin{cases} v_0 + \frac{3}{2}a = 2 \\ 4v_0 + 16a = 6 \end{cases}$

(2)-4*(1):
$4v_0 - 4v_0 + 16a - 6a = 6 - 8$
$a = -\frac{1}{5}\ m/s^2 \qquad v_0 = 2 - \left(-\frac{1}{5} * \frac{3}{2}\right) = 2\frac{3}{10}\frac{m}{s} = 2.3\ m/s$

The distance traveled by car in the 9th second:
$d = (v_0 + 8s * a)1s + \frac{a(1s)^2}{2} = 2.3 - 8/5 - 1/10 = 6/10m = 0.6\ m$

Answer: 0.6 m