1. Posición posición en x

$$x(t) = 2.0\ m - (0.25\ m/s^2)\,t^2$$

Evaluación

$$x(0.0\ s) = 2.0\ m - (0.25\ m/s^2)\,(0.0\ s)^2 = \boxed{2.0\ m}$$
$$x(1.0\ s) = 2.0\ m - (0.25\ m/s^2)\,(1.0\ s)^2 = \boxed{1.8\ m}$$
$$x(2.0\ s) = 2.0\ m - (0.25\ m/s^2)\,(2.0\ s)^2 = \boxed{1.0\ m}$$

2. Posición posición en y

$$y(t) = (1.0\ m/s)\,t + (0.025\ m/s^3)\,t^3$$

Evaluación

$$y(0.0\ s) = (1.0\ m/s)\,(0.0\ s) + (0.025\ m/s^3)\,(0.0\ s)^3 = \boxed{0.0\ m}$$
$$y(1.0\ s) = (1.0\ m/s)\,(1.0\ s) + (0.025\ m/s^3)\,(1.0\ s)^3 = \boxed{1.0\ m}$$
$$y(2.0\ s) = (1.0\ m/s)\,(2.0\ s) + (0.025\ m/s^3)\,(2.0\ s)^3 = \boxed{2.2\ m}$$

3. Posición del vector posición

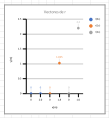
$$\vec{r}(t) = x\,\hat{i} + y\,\hat{j} = \left[(2.0\ m) - (0.25\ m/s^2)\,t^2\right]\hat{i} + \left[(1.0\ m/s)\,t + (0.025\ m/s^3)\,t^3\right]\hat{j}$$

Evaluación

$$\vec{r}(0.0\ s) = \left[(2.0\ m) - (0.25\ m/s^2)\,(0.0\ s)^2\right]\hat{i} + \left[(1.0\ m/s)\,(0.0\ s) + (0.025\ m/s^3)\,(0.0\ s)^3\right]\hat{j} = \left[2.0\ m\right]\hat{i} + \left[0.0\ m\right]\hat{j} = \boxed{(2.0\ m)\,\hat{i} + (0.0\ m)\,\hat{j}}$$
$$\vec{r}(1.0\ s) = \left[(2.0\ m) - (0.25\ m/s^2)\,(1.0\ s)^2\right]\hat{i} + \left[(1.0\ m/s)\,(1.0\ s) + (0.025\ m/s^3)\,(1.0\ s)^3\right]\hat{j} = \left[1.8\ m\right]\hat{i} + \left[1.0\ m\right]\hat{j} = \boxed{(1.8\ m)\,\hat{i} + (1.0\ m)\,\hat{j}}$$
$$\vec{r}(2.0\ s) = \left[(2.0\ m) - (0.25\ m/s^2)\,(2.0\ s)^2\right]\hat{i} + \left[(1.0\ m/s)\,(2.0\ s) + (0.025\ m/s^3)\,(2.0\ s)^3\right]\hat{j} = \left[1.0\ m\right]\hat{i} + \left[2.2\ m\right]\hat{j} = \boxed{(1.0\ m)\,\hat{i} + (2.2\ m)\,\hat{j}}$$

4. Velocidad en la línea de desplazamiento en cualquier de la trayectoria

	$v(m)$	$v(m)$
[s]	v_x	v_y
0.0	v_{x0} 0.0	v_{y0} 1.0
1.0	v_{x1} -0.5	v_{y1} 1.0
2.0	v_{x2} -1.0	v_{y2} 2.2


Vectores de v
v(t)
v(t)
v(t)