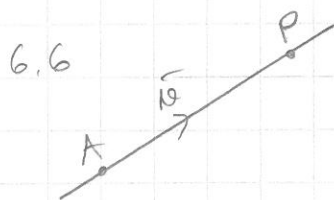


$$b) \quad t=1: \vec{OP} = 4\vec{i} + 3\vec{k} \Rightarrow \underline{P = (4, 0, 3)}$$

$$t=2: \vec{OP} = 2\vec{i} + \vec{j} + 6\vec{k} \Rightarrow \underline{P = (2, 1, 6)}$$



$$A = (6, 0, 8), \quad \vec{n} = \vec{i} + 3\vec{j} - 4\vec{k}$$

$$P \text{ on line} \Leftrightarrow \vec{AP} \parallel \vec{n} \Leftrightarrow \vec{AP} = t\vec{n} = t\vec{i} + 3t\vec{j} - 4t\vec{k}$$

$$\Rightarrow P = (6+t, 3t, 8-4t)$$

$$P \text{ on } yz\text{-plane} \Leftrightarrow x = 6+t = 0 \Leftrightarrow t = -6$$

$$\Rightarrow P = (6-6, 3 \cdot (-6), 8-4 \cdot (-6)) = \underline{(0, -18, 32)}$$

