If the point P is outside the plane $\alpha$ and the straight line $a$ is on the plane $\alpha$, let N be the foot of the perpendicular from point P to the straight line $a$, and $b$ be the straight line passing through N on the plane $\alpha$ and perpendicular to the straight line $a$. PM is perpendicular to the plane $\alpha$.

$$
\begin{aligned}
& \text { 점 } \mathrm{P} \text { 가 평면 } \alpha \text { 밖의 점이고 직선 } a \text { 가 평면 } \alpha \text { 위에 } \\
& \text { 있을 때 점 } \mathrm{P} \text { 에서 직선 } a \text { 에 내린 수선의 발을 } \mathrm{N} \\
& \text { 이라하고 평면 } \alpha \text { 위에서 } \mathrm{N} \text { 을 지나고 직선 } a \text { 에 } \\
& \text { 수직인 직선을 } b \text { 라고하면 } \mathrm{P} \text { 에서 } b \text { 에그은 수선 } \mathrm{PM} \\
& \text { 은 평면 } \alpha \text { 에 수직이다. }
\end{aligned}
$$

(If the point P is outside the plane $\alpha$ and the straight line $a$ is on the plane $\alpha$, let N be the foot of the perpendicular from point P to the straight line $a$, and $b$ be the straight line passing through N on the plane $\alpha$ and perpendicular to the straight line $a$. PM is perpendicular to the plane $\alpha$.)

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Min Eun Gi : https://min7014.github.io

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Github:
$\underline{\text { https://min7014.github.io/math20230127001.html }}$
Click or paste URL into the URL search bar, and you can see a picture moving.

