|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Punkt P ∈ g** | **Richtungsvektor** $r ⃗$ | **Parameterform**$X ⃗=P ⃗+$**t.**$r ⃗$ | **Normalvektor** $n ⃗$ | **Normalvektorform/allgemeine Form**$n ⃗$**.**$ X ⃗$**=** $n ⃗.P ⃗$ | **explizite Form/Funktiony = kx +d** |
| P(3/2) | $$\vec{r}=\left(\begin{matrix}1\\-4\end{matrix}\right)$$ | $$\left(\begin{matrix}x\\y\end{matrix}\right)=\left(\begin{matrix}3\\2\end{matrix}\right)+t .\left(\begin{matrix}1\\-4\end{matrix}\right)$$ | $$\vec{n}=\left(\begin{matrix}4\\1\end{matrix}\right)$$ | $\left(\begin{matrix}4\\1\end{matrix}\right).\left(\begin{matrix}x\\y\end{matrix}\right)=\left(\begin{matrix}4\\1\end{matrix}\right).\left(\begin{matrix}3\\2\end{matrix}\right)$ 4x+y = 14 | y = -4x +14 |
| P(-1/5) | $$\vec{r}=\left(\begin{matrix}3\\4\end{matrix}\right)$$ |  |  |  |  |
|  |  | $$\left(\begin{matrix}x\\y\end{matrix}\right)=\left(\begin{matrix}-3\\2\end{matrix}\right)+t .\left(\begin{matrix}1\\4\end{matrix}\right)$$ |  |  |  |
| P(1/1) |  |  | $$\vec{n}=\left(\begin{matrix}2\\-5\end{matrix}\right)$$ |  |  |
| Tipp: Punkt durch Probieren suchen! |  |  |  | x-2y=4  |  |
|  |  |  |  |  | y = 2x - 3  |
|  |  |  |  |  | y=4Tipp: Skizze der Gerade |