The points $A(0, 9, 7)$, $B(5, -1, 2)$, $C(4, 1, 3)$ and $D(x, -2, 2)$ are such that $\overrightarrow{AB}$ is perpendicular to $\overrightarrow{CD}$.

Determine the value of x.   **4**

Answer:

$x = -3$