

QUESTION

Write down the vector equation of the straight line which passes through the two points $A(1, 2, -1)$ and $B(0, 1, -3)$.

ANSWER

$$A(1, 2, -1), B(0, 1, -3) \quad \vec{AB} = (0 - 1, 1 - 2, -3 + 1) = (-1, -1, -2)$$

The equation of the line is $\mathbf{r} = (1, 2, -1) + t(-1, -1, -2)$