Step-1

Given $a=(2,-2,1), b=(1,2,2)$.We have to find the angle between a and b.

Step-2

Let θ be the angle between a and b.

Then $\cos\theta=\frac{a^T b}{\|a\|\|b\|}$ â€¦â€¦.. (1)

$$a^T b=(2,-2,1)\begin{pmatrix}1\\2\\2\end{pmatrix}$$

$$=2-4+2$$
$$=0$$

Step-3

$$\|a\|=\sqrt{2^2+(-2)^2+1^2}$$
$$=3$$
$$\|b\|=\sqrt{1^2+2^2+2^2}$$
$$=3$$

By (1), $\cos\theta=\frac{0}{3(3)}$

$$=0$$

Hence $\theta=\cos^{-1}0$

$$=\boxed{\frac{\pi}{2}}$$