Usage:

[P] = getCorrectCameraMatrix(PXcam, K1,K2, X)

Given the essential matrix, two matching points in two images, and the camera calibration of both images, it checks which of the 4 possible solutions (p259) is the correct one by reprojecting in 3D.

Input E - 3x3 essential matrix

 $\mbox{K1}$ - $3\mbox{x3}$ Camera calibration of image 1 $\mbox{K2}$ - $3\mbox{x3}$ Camera calibration of image 2

 ${\tt X}$ - ${\tt 3x2}$ homogeneous points in images 1 and 2

Output P - 3x4 Correct camera matrix (rotation and translation)

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