



As can be seen in the picture the velocity vector makes 15° angle with the x -axis, and the x' -axis makes -10° degrees with the x -axis. So, the velocity vector makes a 25° degrees angle with the x' -axis as shown in the figure. By decomposing V we get $V(x') = V \cdot \cos(25)$ and $V(y') = V \cdot \sin(25)$.