

Match a name and formula to the physical/geometric description. If the description contains the word certain then clarify which vector or plane “certain” refers to.

how fast we are traveling  
along the curve in time

how fast a certain tangent  
vector is changing in space  
and the deviation of the  
curve from being a straight  
line

how far we are traveling  
along the curve in space

captures the movement of a  
certain tangent in time

how fast we are twisting out  
of a certain plane in space

captures the movement of a  
certain tangent in space

captures the movement of a  
certain plane in space

unit vector lies along the di-  
rection which the curve is  
currently bending in

turns away from a certain  
tangent and toward a  
certain binormal