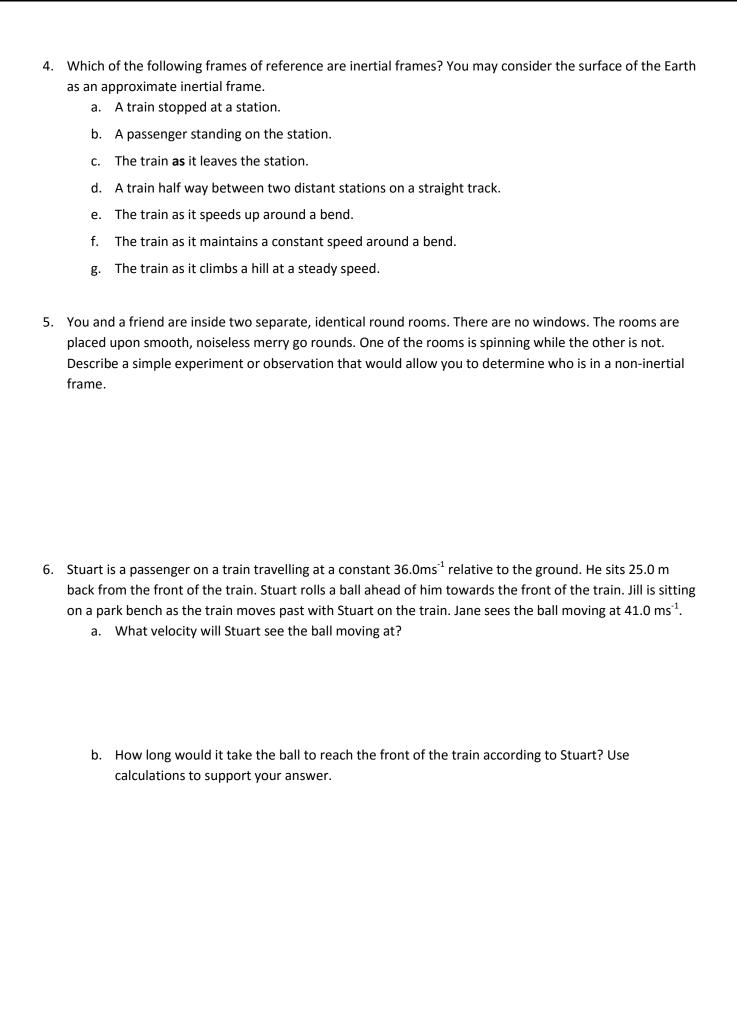
Postulates of Special Relativity Problems

1.	In Galilean relativity, all motion is a measurement made by an observer and there is no absolute frame of reference. Describe what is meant by an absolute frame of reference and why there is no absolute frame of reference.
2.	In the late 19th century, contradictory observations of light and its movement through the proposed ethereal medium led Einstein to develop the theory of special relativity. a. State the two postulates of Einstein's theory of special relativity.
	b. Describe why one of these postulates seems contradictory to the other.
3.	Describe what an inertial frame is.



c.	How long does it take the ball to reach the front of the train according to Jill? Use calculations to support your answer.
Ч	Why do Jill and Stuart agree on how long it takes the ball to reach the front of the train despite
u.	not agreeing on the velocity of the ball?
e.	When the same situation is repeated using a photon of light instead of a ball, Stuart and Jill disagree on the time the light reaches the front of the train. Why?