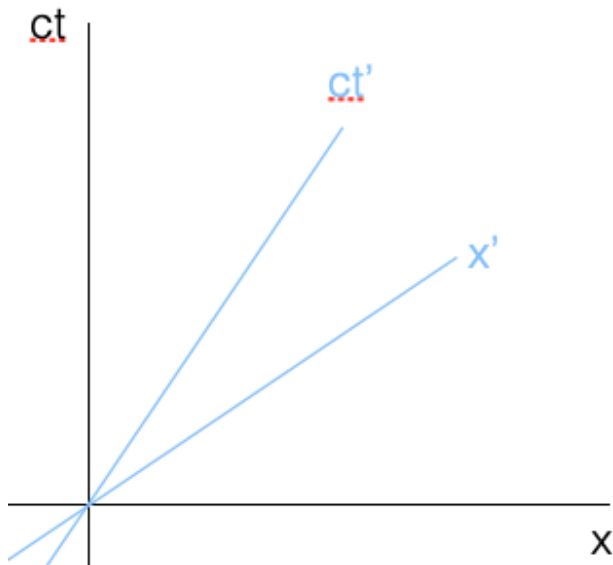


1 Relativistic Right Angles



- Draw two spacetime vectors, one on the ct' axis and one on the x' axis.
- Write these vectors as column matrices with the primed coordinates. (You can choose numbers or do it generally with variables.)
- Take the dot product between these two vectors. What is the result? What does it mean?
- How would an observer in the unprimed frame write these columns? (Hint: Lorentz Transformation.)
- Take the dot product between these two vectors. What is the result? What does it mean?