

Name _____

Print out and use this as a cover sheet for your hand-written answers.

1. State the two principle features that are synthesized when Special Relativity is combined with Quantum Mechanics and give one important observed consequence of each.
[7.1 Space-Time Revisited]
2. With the aid of Feynman diagrams, explain how particle physics accounts for the idea of force between particles.
[7.2 Particles and Force-Fields]
3. Using the basic drawing rules of QED and labelling axes and world-lines, connect up the following world-lines of electrons and positrons in *two* possible ways to make Feynman diagrams. (Note: you can bend the world-lines to make them fit.)
[7.1 Space-Time Revisited, 7.2 Particles and Force-Fields]

