Suppose the position of one particle is given by the equations \( x_1(t) = 2 \cos(t) \) and the \( y_1(t) = 3 \sin(t) \) position of a second particle is given by the equations \( x_2(t) = t + 2 \) where \( t \) represents time \((-\infty < t < \infty)\). Answer the following two questions.

A. Do the particles ever collide? At what time and what position?

B. Do the parametric curves defined by the two pairs of equations intersect? At what points?