Age-old problems

A. Lucy and Leroy have birthdays on the same day. On their birthday this year, Lucy said: "Leroy is four times as old as me. In three years' time, he will be three times as old as me."

How old will Leroy be when he is twice as old as Lucy?

B. Sam said to his friend: "Two days ago, Kate was still 10. Her 13th birthday will be next year."
When is Kate's birthday?

