

Birthday cakes

When Jack was one year old his mother bought a packet of 24 candles for his birthday cake.

That year she put one candle on Jack's cake, and when he was 2 he had 2 candles, and when he was 3 he had 3 candles and so on.



One day Jack's little sister Kate was born. Kate had one candle on her first birthday cake, 2 candles on her second birthday cake, and so on.

The candles were finished on one of Jack's birthdays with just enough left.

How old was Jack when Kate was born?

How old were they both when the candles finally ran out?

Use the 24 sticks to help you to work it out.