



When Jack was one year old, his mother bought a pack of 24 candles. She put one candle on his birthday cake.



When Jack was two he had two candles on his cake, and when he was three he had three candles, and so on.

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

On one of Jack's birthdays, there were exactly enough candles left for Jack's mother to put the candles on his birthday cake. After that, the packet was empty.

How old was Jack when Kate was born? And how old was each of them when the candles finally ran out?