

# Darlene and Tobey

Darlene is a typical 10-year-old girl. Like many kids, she has a younger sibling who is always causing trouble. Darlene has it extra hard though. Her little brother Tobey also has all sorts of crazy powers!

Today Tobey is playing in the street. It's dangerous... for the cars! Tobey has trouble telling the difference between toy cars and real cars. He uses his powers to zoom them around all over the place. Currently Tobey has three cars, a motorcycle, and a semi-truck floating in mid-air! The cars weigh 3000 pounds each. The motorcycle weighs 400 pounds. The semi weighs 34,000 pounds! How much weight in total is Tobey lifting?

Tobey wants someone to play with, but Darlene is too busy with her homework. He uses his powers to travel back in time. Now there are two Tobeyes! He does this four more times, doubling the number of Tobey's each time. How many Tobeyes are there after he is done?

The Tobey's are hungry. There isn't enough food in the house for all of them, so they join forces and cause it to rain baked beans. The Tobeyes run outside and open their mouths, letting the baked beans fall in. If a Tobey opens its mouth wide, about  $\frac{1}{4}$  cup of baked beans will fall into it every 5 minutes. How many cups of baked beans will a Tobey enjoy if they stand outside for 40 minutes?

Darlene is furious. She now has baked beans in her hair! She shoos the other Tobeyes back to their own timelines and confronts the original Tobey about his behavior. Tobey feels bad. He decides to make it up to Darlene by growing his brain to an incredible size and helping her with her homework. With Tobey's help, Darlene is able to get through her homework in about  $\frac{2}{3}$  the time that it would normally take her. Darlene expected to spend 4 hours on her homework. How much time did she actually spend? Write your answer in terms of hours and minutes.

