

Changing Tyres

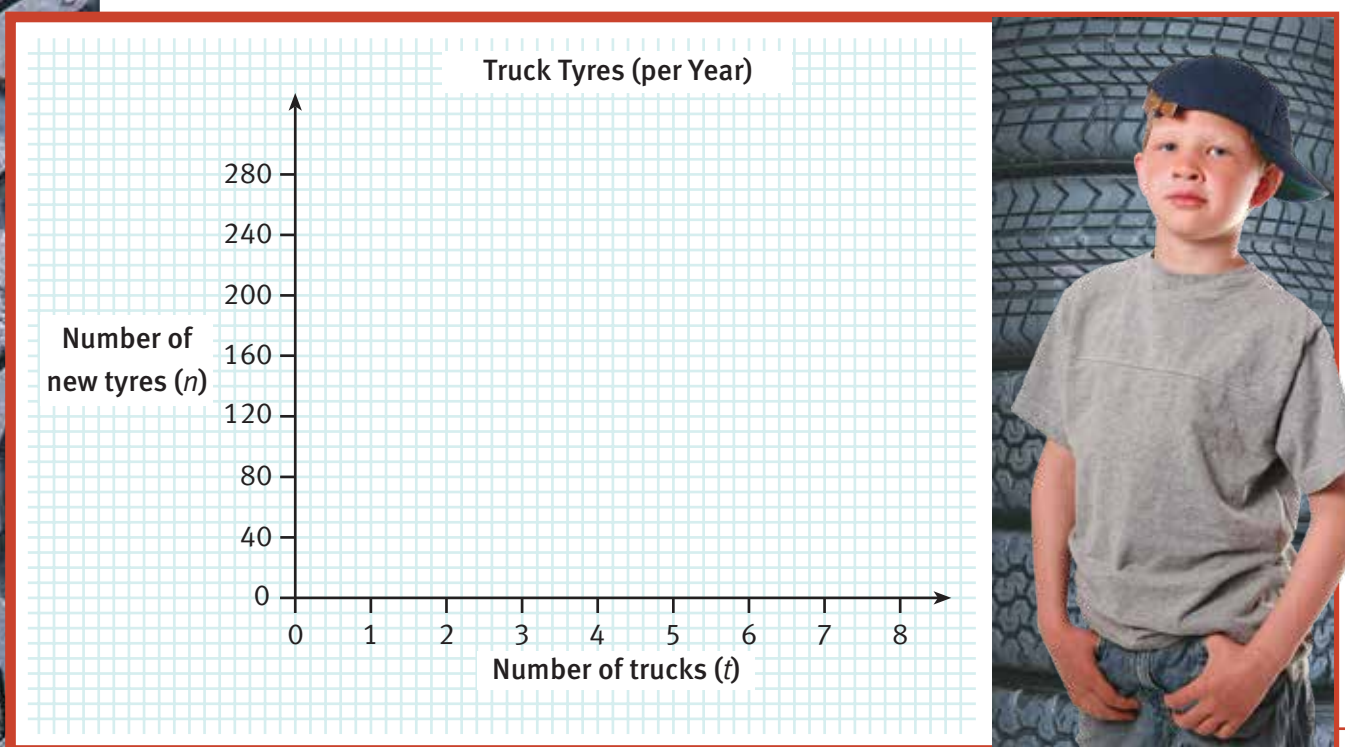
You need: graph paper

ACTIVITY

Mik's dad owns a trucking business and has to budget for changing truck and car tyres every 50 000 kilometres.

His trucks average 100 000 kilometres a year and his cars 20 000 kilometres a year.

- How often, on average, would he change the tyres on his trucks?
- Each truck needs 14 tyres altogether (8 of these are for the trailer). How many truck tyres for each truck per year should Mik's dad budget for?
 - Write a formula for the number of tyres he should budget for his trucks each year. In your formula, use n to stand for the number of tyres and t to stand for the number of trucks.
- Use your formula from question 2 to work out how many tyres Mik's dad should budget for if he has:
 - 6 trucks
 - 8 trucks.
- Draw a graph on axes like the ones below showing the number of truck tyres budgeted for each year against the number of trucks Mik's dad might own.



- Draw a graph for the number of car tyres budgeted for. Count 5 tyres for each car. (You will find it helpful if you first work through questions 1 and 2 for cars instead of trucks.)
 - How many car tyres should he budget for each year for 8 cars?