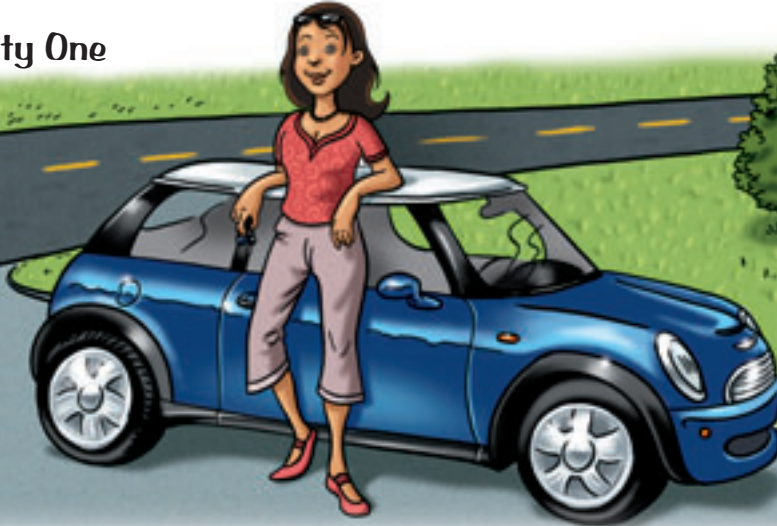


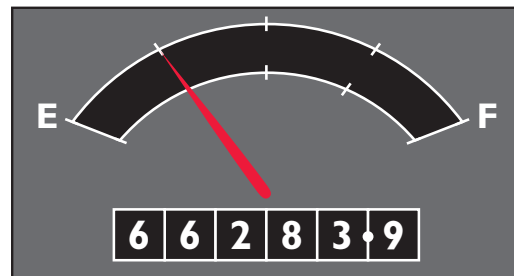
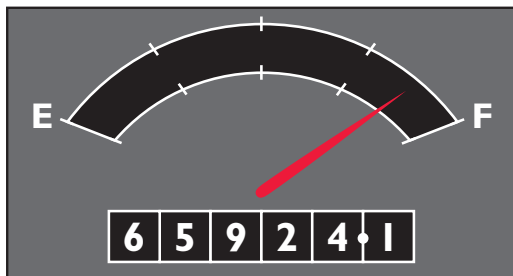
Deb the Driver

You need a calculator

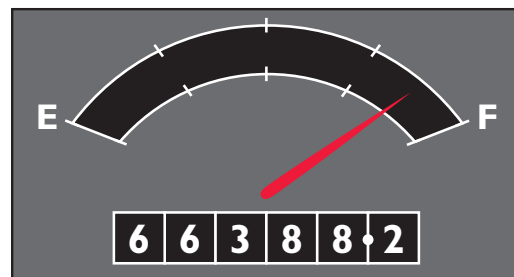
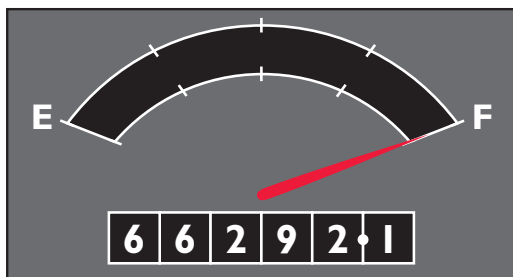
Activity One



The fuel tank in Deb's car holds 48 litres. Here are the car's fuel gauge and odometer at the start and finish of a trip. The odometer shows the distance travelled in kilometres.



1. How far has Deb travelled on this trip?
2. Approximately how much fuel has her car used?
3. How many kilometres per litre (km/L) has Deb's car done on this trip?
4. Deb gives her car a tune-up and then goes for another, shorter, drive. Here are the gauges at the start and finish:



Has tuning the car improved its economy? Explain your answer.

Activity Two

The next day, Deb sets out on a long trip.

I've filled the tank and I'm off.
48 litres should last for a while.

This road is nearly empty.
I should be able to average
a speed of 80 kilometres
per hour.

1. a. Use the information from Activity One, question 4 to work out how far Deb should now be able to drive on a full tank.
b. If she averages 80 kilometres per hour (km/h), how long will it take Deb to drive this distance?
2. Deb is not sure if her speedometer is working properly. She decides to test it on a drive to Cromwell:

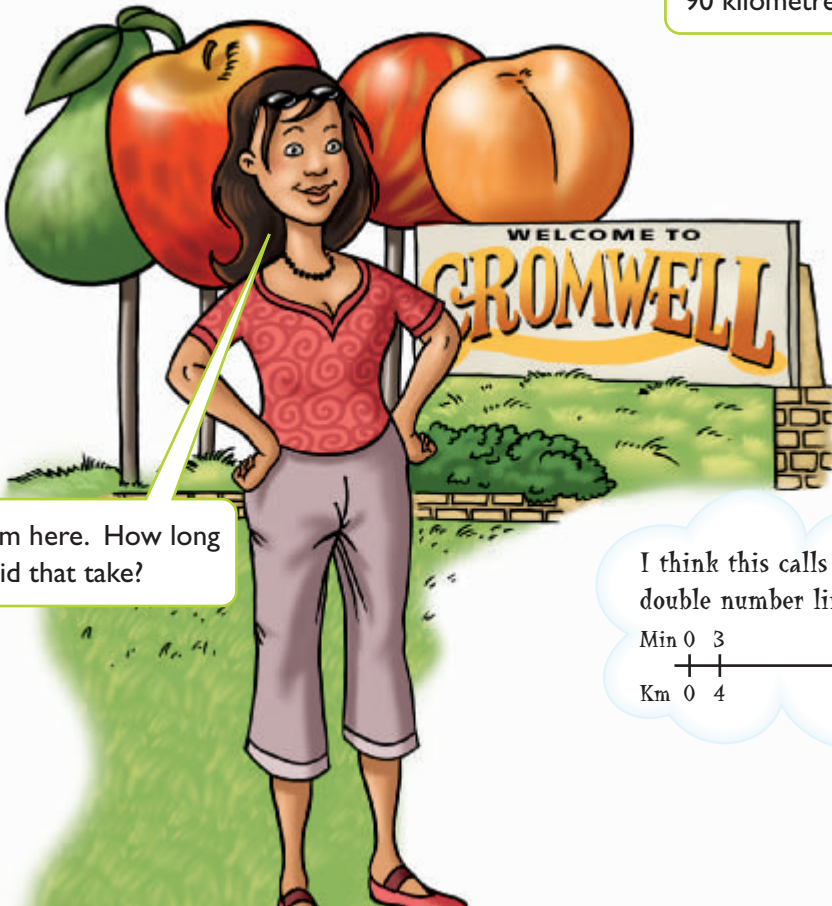
I'll drive steadily at
90 kilometres per hour.



If her speedometer is correct, how long should the journey to Cromwell have taken?

3. The journey took 27 minutes. What speed was Deb's car really doing when the speedometer was reading 90 kilometres per hour?

I'm here. How long did that take?



I think this calls for a
double number line ...

