## Answers to Workbook exercises Chapter 15

## **Exercise 15.1 Alcohol and traffic accidents**

- Young drivers have most accidents, with more than five fatal collisions per 10 000 licensed drivers, for 16-year-olds. The number of accidents gradually decreases as the drivers get older, reaching a minimum of about 1.3 fatal collisions per 10 000 licensed drivers in the 61–70 age group. The number of accidents then increases again, so that drivers aged 81 and over have about the same number of collisions per 10 000 licensed drivers as the 21–30 age group.
- b Young drivers probably have so many accidents because they are not very experienced, and are not aware of the circumstances that may cause accidents. They may have a tendency to drive faster than older drivers, and with less caution and understanding of road conditions and the likely behaviour of other drivers. As drivers get older, they gain experience and become better drivers. After the age of 70, however, this increase in experience is outweighed by factors relating to ageing, such as poor eyesight or slower reaction times.
- c The highest number of fatal accidents involving drivers drinking alcohol was in the 18–20 age group. The highest proportion of fatal accidents involving drivers drinking alcohol was in the 21–30 age group.

d Alcohol slows down reactions, increasing reaction time and therefore braking time – the time taken to bring a car to a stop after seeing a danger and responding to it by braking. Alcohol can also increase a person's self-confidence, so that they don't realise they have been affected by alcohol, and may drive more recklessly than they normally would.

## **Exercise 15.2 Smoking and life expectancy**

- a i 100
  - ii Just below 80
- **b** i 100
  - ii Just below 50
- **c** Look for:
  - a general statement for example, the more cigarettes a person smokes, the less long they are likely to live
  - a reference to specific survival rates at one or more ages, comparing at least two different rates of smoking (or not smoking)
  - a recognition that at least some people who smoke a lot of cigarettes survive into their 90s
  - a recognition that at least some people who do not smoke at all die in their 40s.
- **d** Answers could mention any smoking-related disease, such as lung cancer, chronic bronchitis, emphysema.

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