| Pupils should be taught to: | As outcomes, Year 7 pupils should, for example: |
|---|---|

**Calculate statistics from data, using ICT as appropriate, finding the mode, mean, median and range (continued)**

**Calculate statistics.** For example:

• A competition has three different games.
  Jane has played two of the games.

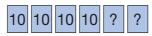|  | Game A | Game B | Game C |
|---|---|---|---|
| Score | 62 | 53 |  |

To win, Jane needs a mean score of 60.
How many points does she need to score in game C?

• Phil has these four cards.
  The mean is 4.

  | 1 | 8 | 5 | 2 |

  Phil takes another card. The mean of the five cards is still 4.
  What number is on his new card?

  | 1 | 8 | 5 | 2 | ? |

• Rajshree has six cards.

  | 10 | 10 | 10 | 10 | ? | ? |

  The six cards have a mean of 10 and a range of 6.
  What are the numbers on the other two cards?

• I can catch either a Direct bus or a Transit bus to go home.
  For my last five journeys on each bus, this is how long I had to wait:

  | Direct bus | 10 min | 8 min | 5 min | 9 min | 8 min |
  | Transit bus | 16 min | 1 min | 2 min | 15 min | 1 min |

  Calculate the mean of the waiting time for each bus.
  Decide which bus it would be more sensible to catch.
  Explain why.

• Five careful measurements were made to find the mass of a nugget of gold. The five measurements were:
  2.003   2.012   1.998   2.000   1.989 ounces.
  Find the mean of the five measurements.

**See Y456 examples (pages 116–17).**