

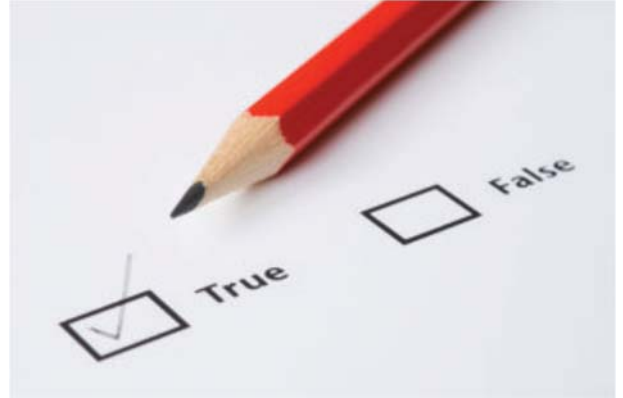
Chapter 5 Task

True – False Tests

/12

Sometimes you may have to make a decision based on limited or no knowledge. Have you ever wondered what would happen if you guessed all the answers on a true-false test? Would it matter how many questions were on the test?

In this task we will determine the likelihood of passing a true-false test if you have guessed all the answers.



**Make sure you have a copy of the class results of the true/false test.
You will need this data to complete the calculations in this task.**

A. Determine the **mean** and **standard deviation** of the data that **does not** include your teacher's question. (2 marks)

B. Is the data normally distributed? Explain your answer. (2 marks)

C. Determine the **mean** and **standard deviation** of the data that **includes your teacher's question**. (2 marks)

D. Is the data normally distributed? Explain your answer. (2 marks)

E. Compare the results for the two sets of data. What do you notice? (2 marks)

F. Is it likely that you will pass a true-false test if you guessed all the answers? Explain your answer. (2 marks)