

1. A DIY store bought 1750 boxes of nails.  
Barry took 25 of these boxes and counted the number of nails in each.  
The table shows his results.

Number of nails	Number of boxes
14	2
15	9
16	8
17	4
18	2

The numbers of nails in the 25 boxes are typical of the numbers of nails in the 1750 boxes.

Work out an estimate for how many of the 1750 boxes contain 16 nails.

.....  
(Total 3 marks)

01.  $\frac{8}{25} \times 1750$  or  $0.32 \times 1750$  or  $8 \times 70$   
= 560

3

*MI for  $\frac{8}{25}$  oe seen or  $\frac{1750}{25}$  oe seen or 0.32 or 70 seen*

*MI for  $\frac{8}{25} \times 1750$  oe*

*A1 for 560*

[3]

**01. Paper 5524**

Candidates were sometimes confused as to how to approach this question. Those who realised it was a probability question usually moved on to obtain the correct answer, whilst those who thought it was a frequency distribution did not. Others stopped after dividing 1750 by 25 using an alternative approach or proceeded to process figures with little reason. Only a minority of candidates obtained full marks.

**Paper 5526**

This was a more unusual question which aimed to test candidates understanding of the relationship between a sample proportion and a population proportion. Some candidates did not recognise it as such and so tried, for example, to calculate the mean. Other candidates clearly did not understand the meaning of the table, itself and used the number of nails in the box (16) as a way of answering the question.