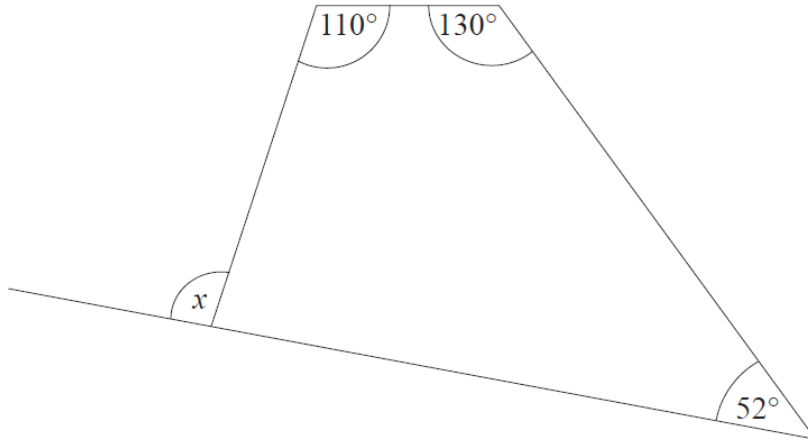


- 5 (a) Work out the size of the angle  $x$  in the diagram below.



Answer \_\_\_\_\_  $^\circ$  [3]

- 16 Write 200 as a product of prime factors, using index notation.

Answer \_\_\_\_\_ [3]

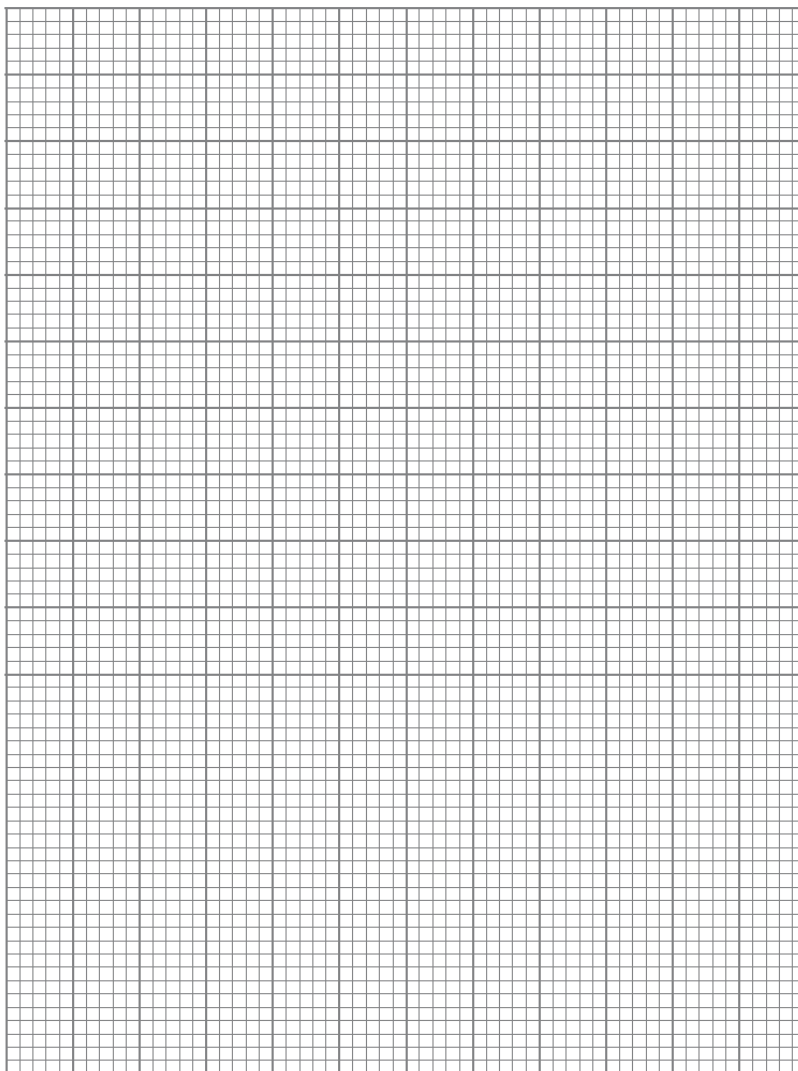
**M3 = 35 days to go!**

25 160 pupils in Year 8 sat a Science examination at the end of the year.

Their results are given in the cumulative frequency table below.

| Examination Mark, $x$ | Cumulative Frequency |
|-----------------------|----------------------|
| $x \leq 20$           | 8                    |
| $x \leq 30$           | 18                   |
| $x \leq 40$           | 28                   |
| $x \leq 50$           | 51                   |
| $x \leq 60$           | 96                   |
| $x \leq 70$           | 128                  |
| $x \leq 80$           | 150                  |
| $x \leq 90$           | 160                  |

(a) On the graph paper below draw a cumulative frequency graph for the data given.



[3]

(b) The pass mark for this examination was 55

Use your graph to estimate the number of pupils who passed the examination.

Answer \_\_\_\_\_ [2]