Calculator	Least and Greatest	AT2 L7

1 The following numbers have been rounded to a certain degree. Give their least and greatest values.

(i)	150	nearest 10	Least = ...	Greatest = ...
(ii)	30	nearest 10	Least = ...	Greatest = ...
(iii)	200	nearest 100	Least = ...	Greatest = ...
(iv)	12	nearest whole no.	Least = ...	Greatest = ...
(v)	3.8	1 decimal place	Least = ...	Greatest = ...
(vi)	3000	nearest 1000	Least = ...	Greatest = ...
(vii)	0.84	2 decimal places	Least = ...	Greatest = ...
(viii)	6	nearest whole no.	Least = ...	Greatest = ...
(ix)	0.2	1 decimal place	Least = ...	Greatest = ...
(x)	3.246	3 decimal places	Least = ...	Greatest = ...

Problems

2 (i) The length of a school hall correct to the nearest metre is 27m. Write down the least and the greatest values of the length of the hall.

(ii) Square carpet tiles have a length of 38 cm correct to the nearest cm. Write down the least and greatest possible values for the length of the sides.

(iii) One row of the tiles is laid side by side along the length of the hall. Neglecting any gaps between the tiles, show that 69 tiles is the **least** possible number of tiles needed to do this.

3 A rectangular card measures 128 mm long and 73 mm wide, each measurement being made correct to the nearest mm.

(i) Write down the least and greatest possible values for the length and the width of the card.

(ii) Two of the cards are placed as shown in the diagram. What is the **least** possible value of the distance AB?