5. The weights, W grams, of kiwi fruit grown on a farm are normally distributed with mean 80 grams and standard deviation 8 grams.

The table shows the classifications of the kiwi fruit by their weight, where k is a positive constant.

Small		**Large**		
Tiny	**Petite**	**Extra**	**Jumbo**	**Mega**
$w < 66$	$66 \leqslant w < 70$	$70 \leqslant w < 80$	$80 \leqslant w < k$	$w \geqslant k$

One kiwi fruit is selected at random from those grown on the farm.

(a) Find the probability that this kiwi fruit is Large.

(3)

35% of the kiwi fruit are Jumbo.

(b) Find the value of k to one decimal place.

(4)

75% of Tiny kiwi fruit weigh more than y grams.

(c) Find the value of y giving your answer to one decimal place.

(5)

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(Total for Question 5 is 12 marks)

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