

8	(a)		Symmetrical, high in middle, tails off at ends	<b>B1</b> [1]	<b>2.4</b>	Any two of these	Not just bell shaped
8	(b)	(i)	$P(35 < m < 45) = 0.296$ Predicted no. = 30	<b>M1</b>  <b>A1</b> [2]	<b>3.4</b>  <b>1.1</b>	Correct probability attempted  Allow 29.6 or '29 or 30'	
8	(b)	(ii)	$P(m < 25) = 0.0122$ Predicted no. = 1	<b>M1</b>  <b>A1</b> [2]	<b>3.4</b>  <b>1.1</b>	Correct probability attempted  Allow 1.2 or '1 or 2'	
8	(c)		29.6 close to 29 and 1.2 close to 0 Hence model (could be) suitable	<b>B1</b>  [1]	<b>3.5a</b>	Both needed	<b>OR B1</b> Model predicts some masses below 25 g, hence not suitable
8	(d)		E.g. Weather may cause different distribution	<b>B1</b>  [1]	<b>3.5b</b>	Any sensible reason why next year may be different	