

Question	Marking Scheme	Evidence
1.	ANS : 52900 tonnes <ul style="list-style-type: none"> <li>• Know how to increase 8%</li> <li>• Know how to calculate amount</li> <li>• Calculate amount of waste</li> <li>• Round to 3 significant figures</li> </ul>	<ul style="list-style-type: none"> <li>• 1.08</li> <li>• <math>42000 \times 1.08^3</math></li> <li>• 52907.904</li> <li>• 52900</li> </ul> <p style="text-align: right;">4 marks</p>
2.	ANS: $y = -2x + 18$ <ul style="list-style-type: none"> <li>• Know how to calculate gradient</li> <li>• Know how to find y intercept</li> <li>• Equation of the line correct</li> </ul>	<ul style="list-style-type: none"> <li>• <math>m = \frac{18-0}{0-9} = -\frac{18}{9} = -2</math></li> <li>• <math>c = 18</math></li> <li>• <math>y = -2x + 18</math></li> </ul> <p style="text-align: right;">3 marks</p>
3. (a)	ANS :172 <ul style="list-style-type: none"> <li>• Calculate the mean</li> </ul>	<ul style="list-style-type: none"> <li>• 172</li> </ul> <p style="text-align: right;">1 mark</p>
(b)	ANS: 4.8cm <ul style="list-style-type: none"> <li>• Calculate <math>(x - \bar{x})^2</math></li> <li>• Substitute into formula</li> <li>• Calculate standard deviation</li> </ul>	<ul style="list-style-type: none"> <li>• 1, 16, 16, 36, 4, 64, 1</li> <li>• <math>\sqrt{\frac{138}{6}}</math></li> <li>• 4.8</li> </ul> <p style="text-align: right;">3 marks</p>
4.	ANS: £100 <ul style="list-style-type: none"> <li>• Know how to calculate gross pay</li> <li>• Know how to work out savings</li> <li>• All calculations correct</li> </ul>	<ul style="list-style-type: none"> <li>• <math>218 + 40 \times 0.8 (=250)</math></li> <li>• <math>250 \div 5 \times 2</math></li> <li>• 100</li> </ul> <p style="text-align: right;">3 marks</p>
5.	ANS: £4851.36 <ul style="list-style-type: none"> <li>• Interpret loan table</li> <li>• Calculate total repayment</li> <li>• Calculate cost of loan</li> </ul>	<ul style="list-style-type: none"> <li>• 413.57</li> <li>• <math>413.57 \times 48</math></li> <li>• <math>19851.36 - 15000 = 4851.36</math></li> </ul> <p style="text-align: right;">3 marks</p>
6.	ANS: £642.50 <ul style="list-style-type: none"> <li>• Know how to calculate taxable income</li> <li>• Know how to calculate lower rate of tax</li> <li>• Know how to calculate upper rate of tax</li> <li>• Know how to calculate monthly tax</li> <li>• Calculate monthly tax bill</li> </ul>	<ul style="list-style-type: none"> <li>• <math>42000 - 5425</math></li> <li>• <math>34600 \times 0.2</math></li> <li>• <math>(36575 - 34600) \times 0.4</math></li> <li>• <math>(6920 + 790) \div 12</math></li> <li>• 642.50</li> </ul> <p style="text-align: right;">5 marks</p>
7.	ANS :25.3cm <ul style="list-style-type: none"> <li>• Know how to find expression for volume of cylinder</li> <li>• Equate volume to 3260</li> <li>• State value for <math>h</math></li> </ul>	<ul style="list-style-type: none"> <li>• <math>\pi \times 6.4^2 \times h</math></li> <li>• <math>\pi \times 6.4^2 \times h = 3260</math></li> <li>• 25.3</li> </ul> <p style="text-align: right;">3 marks</p>