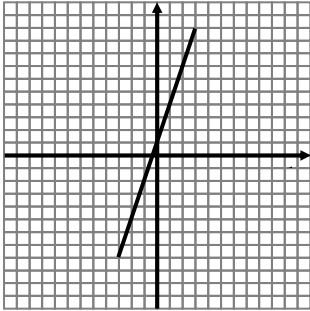
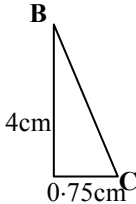


	Give one mark for each ●	Illustrations for awarding mark												
1	<ul style="list-style-type: none"> ●¹ identify correct rate of interest ●² correctly calculate yearly interest ●³ strategy for calculating monthly interest ●⁴ answer 	<ul style="list-style-type: none"> ●¹ 4.4% of £4200 ●² £184.80 ●³ $\frac{8}{12} \times £184.80$ ●⁴ £123.20 <p style="text-align: right;">4 marks KU</p>												
2(a)	<ul style="list-style-type: none"> ●¹ any three values for y correct ●² all values for y correct 	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>x</td> <td>-3</td> <td>-1</td> <td>0</td> <td>1</td> <td>3</td> </tr> <tr> <td>y</td> <td>-8</td> <td>-2</td> <td>1</td> <td>4</td> <td>10</td> </tr> </table> <p style="text-align: right;">2 marks KU</p>	x	-3	-1	0	1	3	y	-8	-2	1	4	10
x	-3	-1	0	1	3									
y	-8	-2	1	4	10									
2(b)	<ul style="list-style-type: none"> ●¹ points plotted correctly ●² line drawn through points 	 <p style="text-align: right;">2 marks KU</p>												
3.	<ul style="list-style-type: none"> ●¹ change litres to millilitres ●² & ●³ correct strategy ●⁴ correct final answer 	<ul style="list-style-type: none"> ●¹ 2 litres = 2000 millilitres ●² total shares = 10 ●³ multiplying factor = 200 ●⁴ $200 \times 2 = \mathbf{400}$ millilitres <p style="text-align: right;">4 marks RE</p>												

	Give one mark for each •	Illustrations for awarding mark
<p>4(a)</p> <ul style="list-style-type: none"> •¹ stem correct •² leaves on correct level •³ leaves-ordered correctly •⁴ key stated 		$ \begin{array}{r l} 1 & 8 \ 9 \\ 2 & 2 \ 7 \ 7 \ 7 \ 8 \ 8 \\ 3 & 0 \ 1 \ 3 \ 4 \ 4 \ 4 \ 5 \ 7 \ 7 \\ 4 & 3 \ 4 \ 5 \end{array} $ <p style="text-align: right;"> $1 \mid 8 = 18$ $n = 20$ </p> <p style="text-align: right;">4 marks KU</p>
<p>4(b)</p> <ul style="list-style-type: none"> •¹ correct strategy •² answer 		<ul style="list-style-type: none"> •¹ $\frac{31+33}{2}$ •² 32 <p style="text-align: right;">2 marks KU</p>
<p>5(a)</p> <ul style="list-style-type: none"> •¹ finds total of 5 times •² knows to divide by 5 •³ answer 		<ul style="list-style-type: none"> •¹ 192.65 secs •² $192.65 \div 5$ •³ 38.53 secs <p style="text-align: right;">3 marks KU</p>
<p>5(b)</p> <ul style="list-style-type: none"> •¹ makes valid comparison 		<ul style="list-style-type: none"> •¹ faster time/less than the mean etc. <p style="text-align: right;">1 mark KU</p>
<p>6.</p> <ul style="list-style-type: none"> •¹ identifies right angled triangle •² knows to use Pythagoras Theorem •³ calculates sloping edge •⁴ calculates perimeter 		<ul style="list-style-type: none"> •¹  •² $BC^2 = 0.75^2 + 4^2$ •³ $BC = 4.1\text{cm}$ •⁴ Perimeter = $2(4.1) + 3.5 + 5 = 16.7\text{cm}$ <p style="text-align: right;">4 marks RE</p>

	Give one mark for each •	Illustrations for awarding mark
7(a)	<ul style="list-style-type: none"> •¹ correct strategy •² calculates angle 	<ul style="list-style-type: none"> •¹ $\frac{360 - 90}{2}$ •² 135° <p style="text-align: right;">2 marks KU</p>
7(b)	<ul style="list-style-type: none"> •¹ calculate fraction of pie chart •² calculate number of people 	<ul style="list-style-type: none"> •¹ $\frac{135}{360} = \frac{3}{8}$ (or 0.375) •² $\frac{3}{8} \times 840 = 315$ students <p style="text-align: right;">2 marks KU</p>
8 (a)	<ul style="list-style-type: none"> •¹ uses correct trigonometric ratio •² calculates angle correctly •³ conclusion 	<ul style="list-style-type: none"> •¹ $\tan x = \frac{3}{12}$ •² $x = 14.04^\circ$ •³ The stop is effective as $10 < 14.03 < 15$ <p style="text-align: right;">3 marks RE</p>
8(b)	<ul style="list-style-type: none"> •¹ calculates C.S.A. •² calculates volume •³ calculates weight correctly •⁴ rounds correctly 	<ul style="list-style-type: none"> •¹ C.S.A. = $\frac{1}{2} \times 12 \times 3 = 18\text{cm}^2$ •² Volume = $18 \times 5 = 90\text{cm}^3$ •³ Weight = $90 \times 0.67 = 60.3\text{g}$ •⁴ 60g <p style="text-align: right;">4 marks RE</p>
9(a)	<ul style="list-style-type: none"> •¹ correct common factor •² bracket 	<ul style="list-style-type: none"> •¹ 4 •² $3x - 2y$ <p style="text-align: right;">2 marks KU</p>
9(b)	<ul style="list-style-type: none"> •¹ collects like terms •² solves correctly 	<ul style="list-style-type: none"> •¹ $4a > 16$ •² $a > 4$ <p style="text-align: right;">2 marks KU</p>

	Give one mark for each •	Illustrations for awarding mark
10(a)	<ul style="list-style-type: none"> •¹ correct strategy •² states equation 	<ul style="list-style-type: none"> •¹ Perimeter = $2l + 2b$ •² $2(2x - 3) + 2(x + 3) = 360$ <p style="text-align: right;">2 marks RE</p>
10(b)	<ul style="list-style-type: none"> •¹ correctly solves equation •² finds breadth 	<ul style="list-style-type: none"> •¹ $6x = 360 \Rightarrow x = 60$ •² $b = 63\text{m}$ <p style="text-align: right;">2 marks RE</p>
11.	<ul style="list-style-type: none"> •¹ calculates swimming time for A •² calculates swimming time for B •³ correctly calculates resting time for B •⁴ calculates time for B •⁵ conclusion 	<ul style="list-style-type: none"> •¹ $T_A = \frac{1500}{75} = 20 \text{ min}$ •² $T_B(\text{swim}) = \frac{1500}{80} = 18 \text{ min } 45\text{sec}$ •³ 9 rests = 90 sec •⁴ $T_B = 18 \text{ m } 45\text{sec} + 90 \text{ sec} = 20\text{min } 15\text{sec}$ •⁵ A finished 15 sec earlier than B <p style="text-align: right;">5 marks RE</p>

Total marks: KU 26 RE 24

**Overall totals: KU: 40
RU: 39**