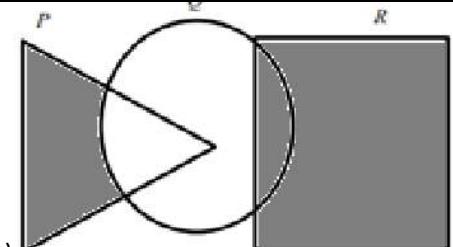
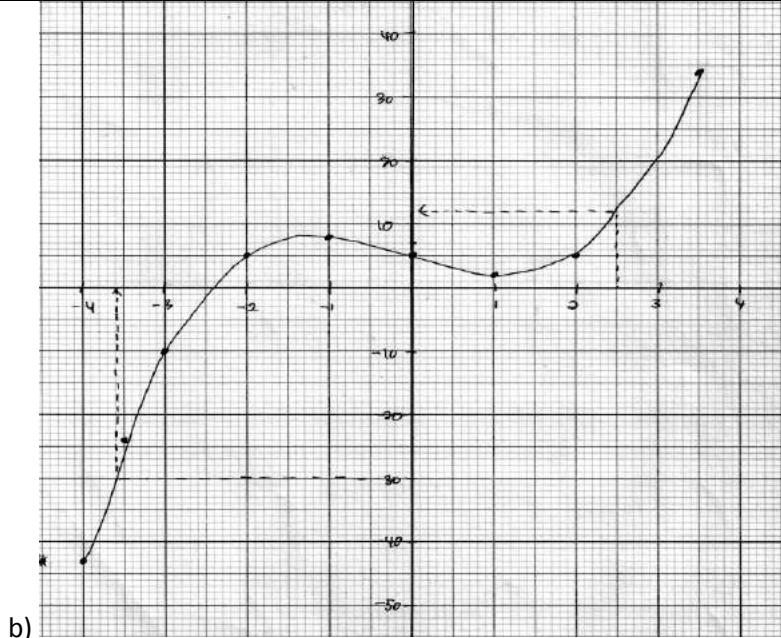


SOALAN	PERATURAN PEMARKAHAN	MARKAH
1	a) $(X \cup Z)'$   b)	P1  N2
2	Isipadu 3 kon = $113.14 \text{ cm}^3$ $J^3 = 27$ $J = 3 \text{ cm}$	K2 K1 N1
3	$\frac{1}{2} \times \frac{22}{7} \times 8^2 + \frac{125}{360} \times \frac{22}{7} \times 12^2 - \frac{55}{360} \times \frac{22}{7} \times 8^2$  $226.98 \text{ cm}^2$	K2  N1
4	a) $m = \frac{-3}{2}$ $y = \frac{-3}{2}x - 8$  b) $0 = \frac{-3}{2}x - 8$  $x = \frac{-16}{3}$	K1  N1  K1  N1
5	$(a - 8)(a + 3) = 60$  $(a - 12)(a + 7) = 0$  $a = 12$ perimeter = 64	K1 K1 N1 N1
6	a) Benar  b) Jika bilangan subset bagi set P ialah 8 maka $n(P) = 3$ Jika $n(P) = 3$ makabilangan subset bagi set P ialah 8  c) $(10-2) \times 180$ $1440$	N1  P1 P1  K1 N1
7	$46.5 - \frac{1}{2} \times 60 \times 0.3 - 60 \times 0.4 = 13.5$  $13.5 = \frac{1}{2} \times (60 + v) \times 0.2$  $v = 75$	K1  K1  N1

8	<p>a)</p> <table border="1" data-bbox="430 226 1200 440"> <thead> <tr> <th>Tempat /Baucer</th><th>Pulau Pinang (P)</th><th>Cameron Highland (C)</th><th>Langkawi (L)</th></tr> </thead> <tbody> <tr> <td>50</td><td>( P , 50 )</td><td></td><td></td></tr> <tr> <td>80</td><td></td><td>( C , 80 )</td><td></td></tr> <tr> <td>100</td><td></td><td></td><td>( L , 100 )</td></tr> <tr> <td>150</td><td>( P , 150 )</td><td>( C , 150 )</td><td></td></tr> </tbody> </table> <p>b) ( L , 100 )</p> $\frac{1}{12}$ <p>c) (P,50), (P,80), (P,100), (P,150), (L,50), (L,80), (L,100), (L,150), (C,150)</p> $\frac{9}{12} @ \frac{3}{4}$	Tempat /Baucer	Pulau Pinang (P)	Cameron Highland (C)	Langkawi (L)	50	( P , 50 )			80		( C , 80 )		100			( L , 100 )	150	( P , 150 )	( C , 150 )		P1 N1 P1 N1 P1 N1 N2
Tempat /Baucer	Pulau Pinang (P)	Cameron Highland (C)	Langkawi (L)																			
50	( P , 50 )																					
80		( C , 80 )																				
100			( L , 100 )																			
150	( P , 150 )	( C , 150 )																				
9	$2b + 4k = 200$ $4b + 2k = 160$ $\begin{pmatrix} 2 & 4 \\ 4 & 2 \end{pmatrix} \begin{pmatrix} b \\ k \end{pmatrix} = \begin{pmatrix} 200 \\ 160 \end{pmatrix}$ $\begin{pmatrix} b \\ k \end{pmatrix} = \frac{1}{-12} \begin{pmatrix} -240 \\ -480 \end{pmatrix}$ $\begin{pmatrix} b \\ k \end{pmatrix} = \begin{pmatrix} 20 \\ 40 \end{pmatrix}$ $85 - 40 = \text{RM}45$	K2 K1 K1 N1																				
10	Syarikat insurans $\frac{80}{100} \times 34000$ =RM27 200  Puan Nurul $\frac{20}{100} \times 34000 + 150$ =RM 6950	K1 N1 K1 N1																				
11	a) <table border="1" data-bbox="319 1630 827 1709"> <tbody> <tr> <td>-3</td><td>0</td><td>1</td></tr> <tr> <td>-10</td><td>5</td><td>2</td></tr> </tbody> </table>	-3	0	1	-10	5	2	N3														
-3	0	1																				
-10	5	2																				

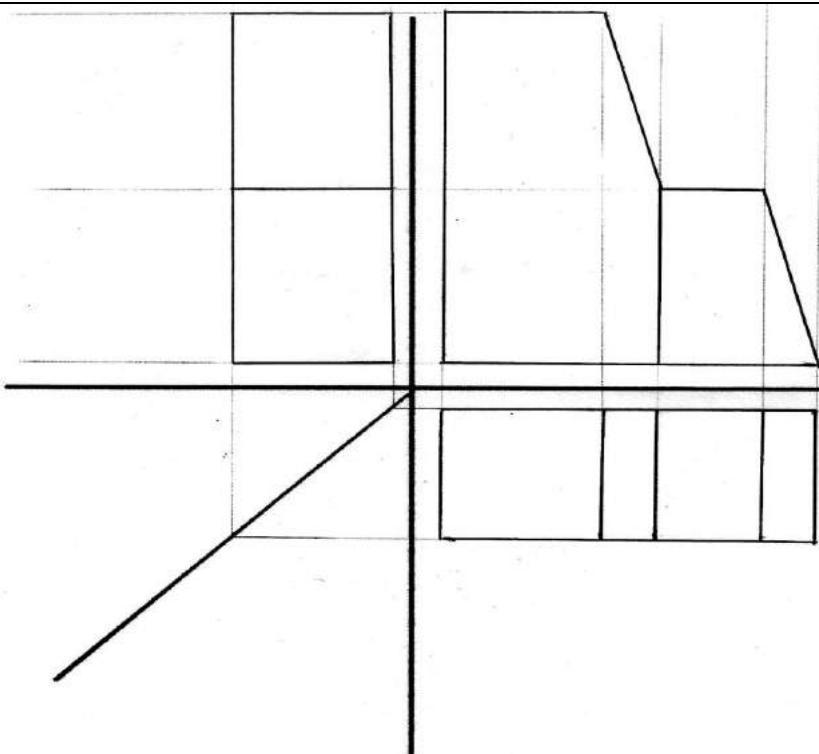


K3  
N1

N1  
N1

- c) i)  $11 \leq y \leq 13$   
ii)  $-3.7 \leq x \leq -3.5$

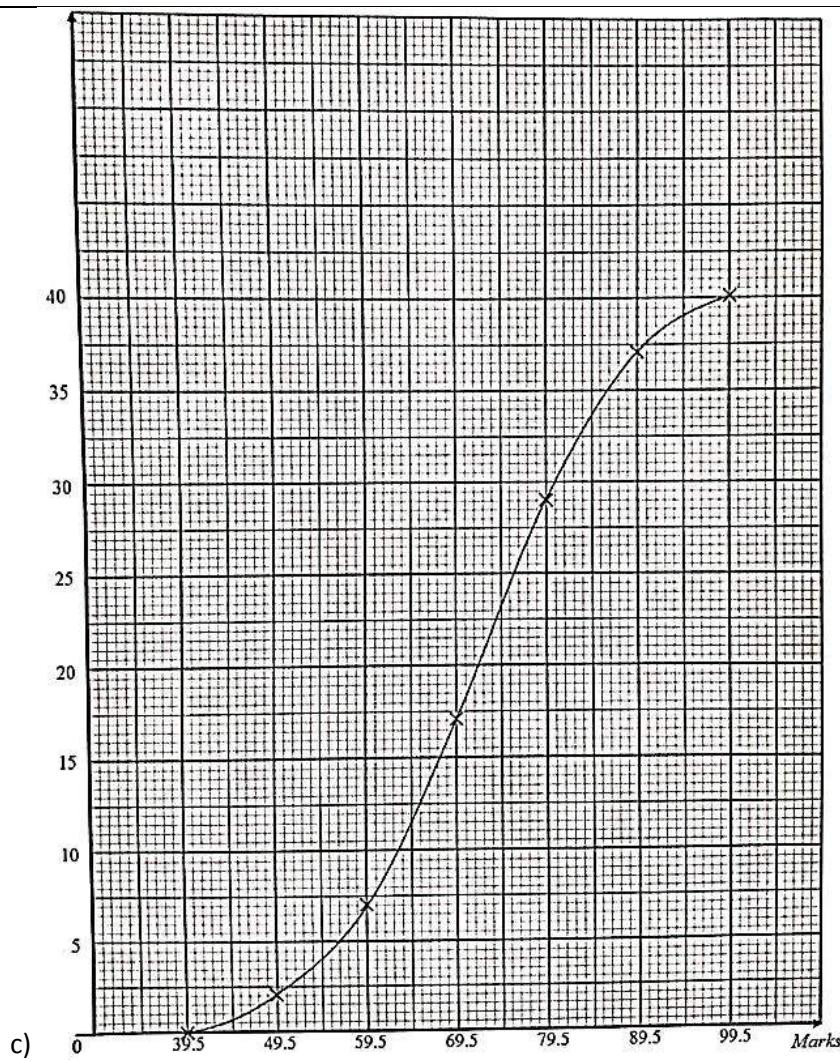
12



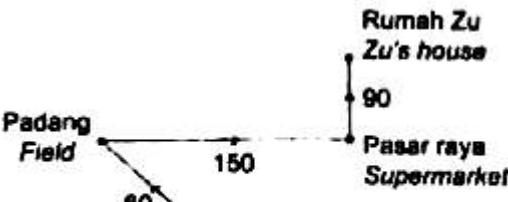
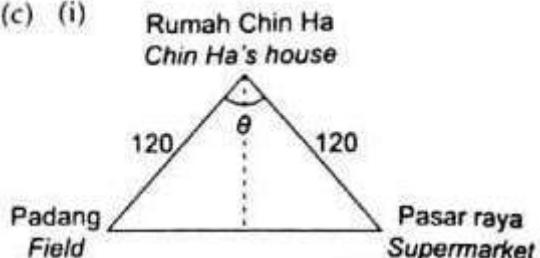
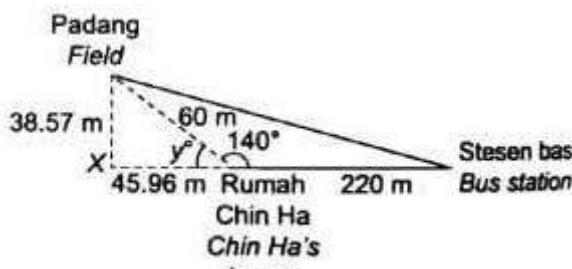
N3  
N3

N3

13	<p>a) <math>h = 1200 \quad k = 800 \quad m = 400</math> Alirantunaipositif</p> <p>b) S – Membelikomputerriba M – Alirantunaipositifsekurangnya RM 200 A – Ahmad mempunyai alirantunaipositif RM 400 R – Bolehmenabung RM200 setiapbulanselama 12 bulan T – Membeli computer ribadalamsetahun</p>	N3 P1  P1 N1 P1 N1 P1																																
14	<p>a) i) Pantulan pada garis <math>y = 6</math></p> <p>ii) Pembesaran pada pusatpembesaran E (1,5) dengan faktorskala <math>\frac{1}{2}</math></p> <p>b) <math>((\frac{1}{2})^2 \times 210)</math>  <math>52.5</math>  <math>210 - 52.5</math>  <math>157.5</math></p>	N2  N3  K1  K1 N1																																
15	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 5px;">Marks</th> <th style="text-align: center; padding: 5px;">Frequency</th> <th style="text-align: center; padding: 5px;">Cumulative Frequency</th> <th style="text-align: center; padding: 5px;">Upper Boundary</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;">30 – 39</td><td style="text-align: center; padding: 5px;">0</td><td style="text-align: center; padding: 5px;">0</td><td style="text-align: center; padding: 5px;">39.5</td></tr> <tr> <td style="text-align: center; padding: 5px;">40 – 49</td><td style="text-align: center; padding: 5px;">2</td><td style="text-align: center; padding: 5px;">2</td><td style="text-align: center; padding: 5px;">49.5</td></tr> <tr> <td style="text-align: center; padding: 5px;">50 – 59</td><td style="text-align: center; padding: 5px;">5</td><td style="text-align: center; padding: 5px;">7</td><td style="text-align: center; padding: 5px;">59.5</td></tr> <tr> <td style="text-align: center; padding: 5px;">60 – 69</td><td style="text-align: center; padding: 5px;">10</td><td style="text-align: center; padding: 5px;">17</td><td style="text-align: center; padding: 5px;">69.5</td></tr> <tr> <td style="text-align: center; padding: 5px;">70 – 79</td><td style="text-align: center; padding: 5px;">12</td><td style="text-align: center; padding: 5px;">29</td><td style="text-align: center; padding: 5px;">79.5</td></tr> <tr> <td style="text-align: center; padding: 5px;">80 – 89</td><td style="text-align: center; padding: 5px;">8</td><td style="text-align: center; padding: 5px;">37</td><td style="text-align: center; padding: 5px;">89.5</td></tr> <tr> <td style="text-align: center; padding: 5px;">90 – 99</td><td style="text-align: center; padding: 5px;">3</td><td style="text-align: center; padding: 5px;">40</td><td style="text-align: center; padding: 5px;">99.5</td></tr> </tbody> </table> <p>a)</p> <p>b) <math>\sqrt{\frac{210930}{40} - 71.5^2}</math>  <math>= \sqrt{161}</math>  <math>= 12.69</math></p>	Marks	Frequency	Cumulative Frequency	Upper Boundary	30 – 39	0	0	39.5	40 – 49	2	2	49.5	50 – 59	5	7	59.5	60 – 69	10	17	69.5	70 – 79	12	29	79.5	80 – 89	8	37	89.5	90 – 99	3	40	99.5	N3  K2  N1
Marks	Frequency	Cumulative Frequency	Upper Boundary																															
30 – 39	0	0	39.5																															
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90 – 99	3	40	99.5																															



		P1
		K2
		N1
16	a) i) $103\ 500 - 300 - 21\ 620$ 81 580  ii) $4\ 600 + 2\ 431.80$ 7 031.80 -750 6 281.80  iii) $480 \times 12 = 5\ 760$ Ya. Bayaran PCB tidak mencukupi dan Encik Khalid perlu membayar lagi sebanyak RM 521.80	N1  K1 K1 N1  N2
	b) $76 \times 27 \times \text{RM}0.25$ RM 513	N1
	c) $x + 2y \leq 80$ $y \leq 2x$	P1 P1
	d) $P : L = 4 : 3$ $L = \frac{3}{4} P$ $2P + 2L = 112$ $2P + 2(\frac{3}{4}P) = 112$	K1 K1

	$P = 32$ $L = 24$ $(32 \times 24) - (1/2 \times 32 \times 24)$ $384\text{cm}^2$	N1 N1 K1 N1
17	a) i) 150 m ii) $\frac{150}{3} = 50\text{m}$	N1 K1 N1
		K2 N1
	b) i) ii) 300m	N1
	(c) (i)  $\sin x = \frac{75}{120}$ $\Theta = 38.68 \times 2$ $\Theta = 77.36$	K1 K1 N1
	ii) $\cos^{-1}(0.766) = 40^\circ$ $y = 140^\circ$	N1
		
	Jarak X dengan padang = $60 \sin 40^\circ = 38.57\text{m}$	K1
	Jarak X dengan Chin Ha = $60 \cos 40^\circ = 45.96\text{m}$	K1
	Jarak = $\sqrt{38.57^2 + (45.96 + 220)^2} = 268.74\text{m}$	K1 N1