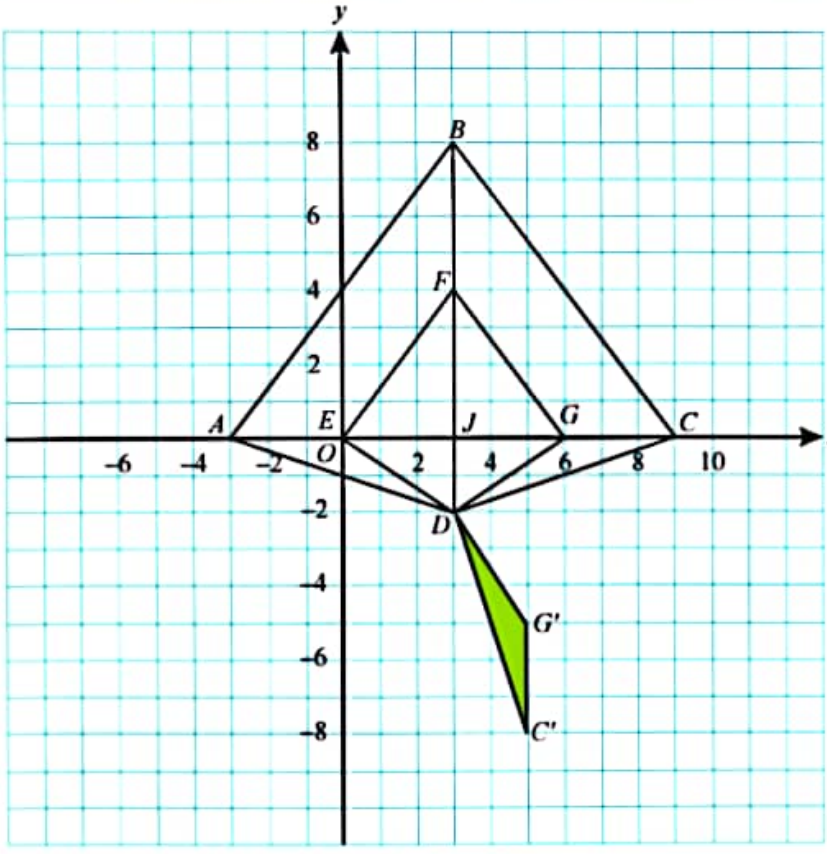
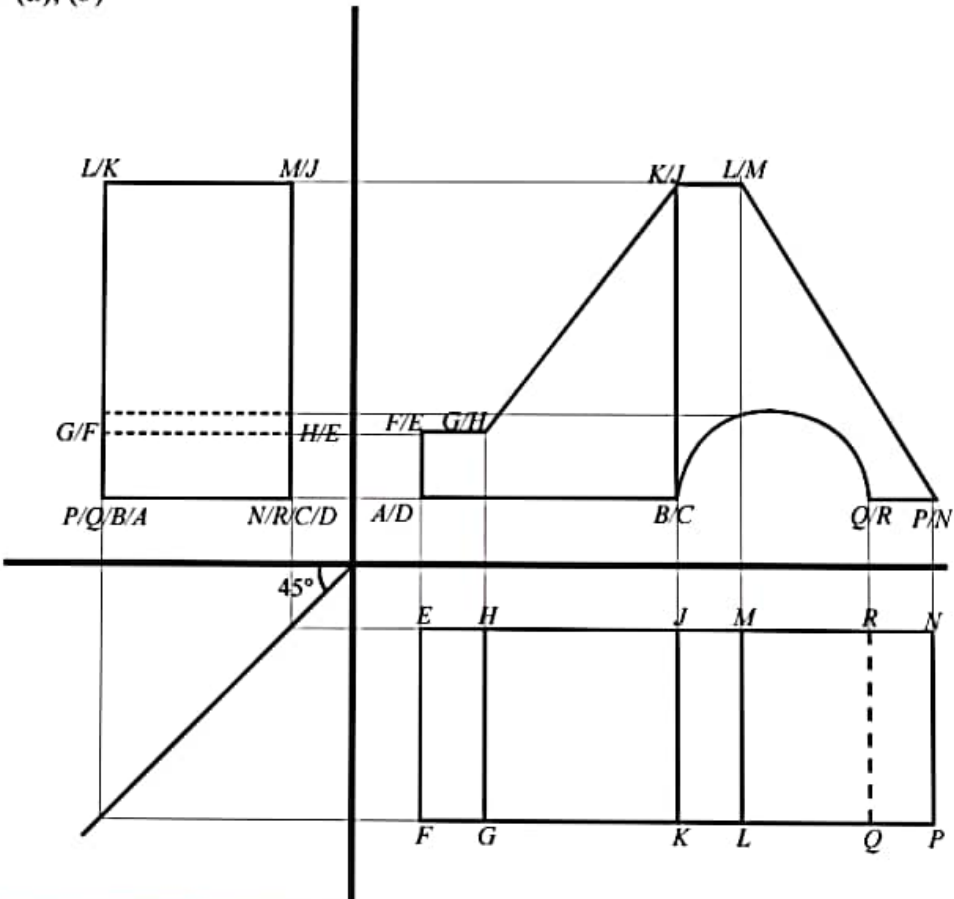


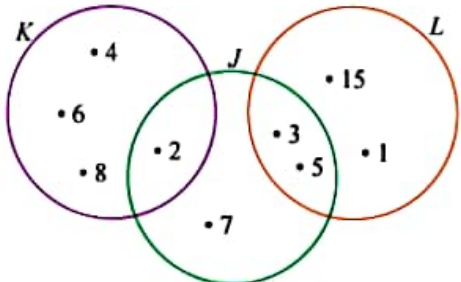
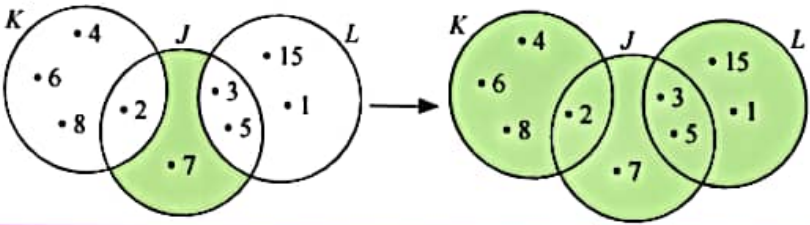
No.	Skema Pemarkahan Marking Scheme	Markah Marks	Markah Total Total Marks
1	4 sisi/sides = $4x + 4$ 1 sisi/side = $\frac{4x + 4}{4} = x + 1$ Luas/Area = $(x + 1)(x + 1)$	1 1	2
2	(a) Beza di antara jujukan/ <i>Difference between a sequence</i> $= \left(\frac{5}{3} - \frac{1}{3}\right) \div 2$ $= \frac{2}{3}$ $J = \frac{1}{3} + \frac{2}{3}$ $= \frac{3}{3}$ $= 1$ $K = \frac{5}{3} + \frac{2}{3}$ $= \frac{7}{3}$ (b) Tambah $\frac{2}{3}$ kepada nombor yang sebelumnya. <i>Add $\frac{2}{3}$ to the previous number.</i>	1 1	3
3	$m = 0.25$ (a) Kecerunan/ <i>Gradient</i> = $\frac{\text{Mengufuk/Horizontal}}{\text{Mencancang/Vertical}}$ $0.25 = \frac{1.25}{x}$ $x = 6$ $\tan \theta = \frac{1.5}{6}$ $\theta = 14.04^\circ$ (b) $\sqrt{1.5^2 + 6^2} = 6.185$	1 1 2	4

No.	Skema Pemarkahan Marking Scheme	Markah Marks	Markah Total Total Marks
4	Sofa $M = (5 \times 9^2) + (4 \times 9^1) + (7 \times 9^0) = 448$ Sofa $N = (2 \times 6^3) + (4 \times 6^2) + (4 \times 6^1) + (1 \times 6^0) = 601$ \therefore Sofa M lebih murah./Sofa M is cheaper.	2 1	3
5	(a) $N \propto \frac{D}{P}$ $N = \frac{kD}{P}$ $480 = \frac{k(5\,000)}{80}$ $k = 7.68$ $N = \frac{7.68D}{P}$ (b) $D = 75\,000, P = 80$ $N = \frac{(7.68)(75\,000)}{80} = 7\,200$	1 1 2	4
6	(a) Gaji/Salary = RM56 000 Derma/Donation = RM200 Pendapatan bercukai/Chargeable income $= 56\,000 - 200 - 9\,000 - 1\,800 - 3\,000$ $= \text{RM}42\,000$ (b) Kos perubatan selepas deduktibel/Medical cost after deductible $= 27\,000 - 2\,000$ $= \text{RM}25\,000$ Kos yang ditanggung oleh Athar/Cost borne by Athar $= \left(\frac{10}{100} \times 25\,000\right) + 2\,000$ $= \text{RM}4\,500$	1 1 2 1	5
7	(a) $y = 3$ (b) (i) $13 = \sqrt{(8-3)^2 + (2-h)^2}$ $169 = 25 + 4 - 4h + h^2$ $0 = h^2 - 4h - 140$ $0 = (h-14)(h+10)$ $h-14 = 0 \quad h+10 = 0$ $h = 14 \quad h = -10$ \therefore Koordinat rumah Liza ialah $(-10, 30)$. Maka, h adalah -10 . <i>The coordinate of Liza's house is $(-10, 30)$. Then, h is -10.</i> (ii) $y = mx + c$ $m = \frac{8-3}{2-(-10)}$ $= \frac{5}{12}$ $3 = \frac{5}{12}(2) + c$ $c = \frac{13}{6}$ $y = \frac{5}{12}x + \frac{13}{6}$	1 1 1 1 1	5

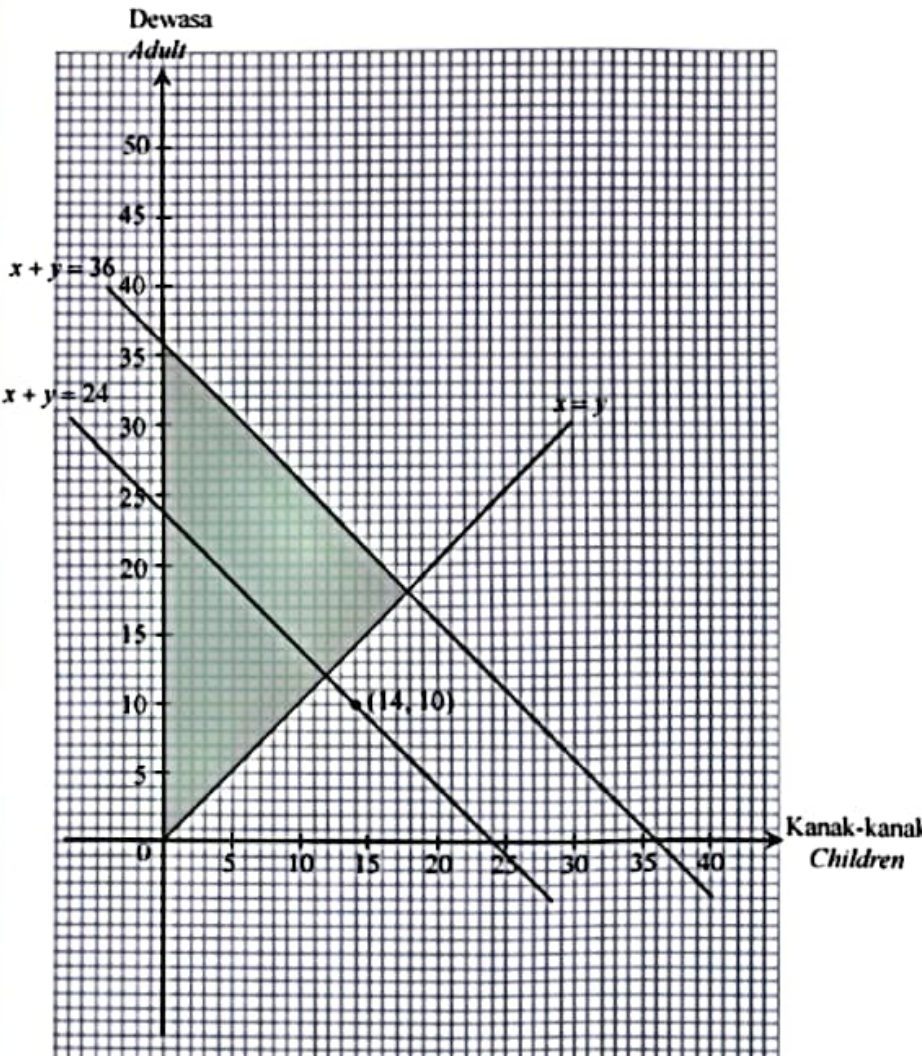
No.	Skema Pemarkahan Marking Scheme	Markah Marks	Markah Total Total Marks
8	$\frac{7+5}{x} = \frac{1}{3}$ $\frac{12}{x} = \frac{1}{3}$ <p>Jumlah murid/Number of students = 3×12 = 36</p> <p>Bilangan murid yang lulus/Number of students who passed = $36 - 12$ = 24</p> <p>Lelaki/Boys = $\frac{24}{3} \times 1$ = 8</p> <p>Perempuan/Girls = $\frac{24}{3} \times 2$ = 16</p> <p>$\therefore x = 8, y = 16$</p>	 1 1 1 1	 4
9	<p>(a) Pendapatan/Income = 3 200 Perbelanjaan/Expenses = 1 950</p> <p>Baki/Balance = $3\,200 - 1\,950$ = RM1 250</p> <p>$14\,400 \div 12$ bulan/months = RM1 200</p> <p>Muaz dapat mencapai matlamat kewangannya kerana baki gajinya melebihi simpanan yang diperlukan untuk beliau membeli motosikal tersebut. <i>Muaz was able to achieve his financial goals because his remaining salary exceeded the savings required for him to buy the motorcycle.</i></p> <p>(b) Pendapatan/Income = 4 000 Perbelanjaan/Expenses = 3 200</p> <p>Aliran tunai positif/Positive cash flow = 1 850 Baki pendapatan/Balance income = $4\,000 - 3\,200$ = 800</p> <p>Pendapatan yang diperoleh daripada kerja sambilan = $1\,850 - 800$ <i>Income earned from the part time job</i> = RM1 050</p>	 1 1 1	 4
10	<p>(a) $\frac{(42 \times 3) + (47 \times 6) + (52 \times m) + (57 \times 16) + (62 \times 10) + (67 \times 4)}{3 + 6 + m + 16 + 10 + 4} = 55.6$</p> $\frac{2\,208 + 52m}{39 + m} = 55.6$ $2\,208 + 52m = 2\,168.4 + 55.6m$ $2\,208 - 2\,168.4 = 55.6m - 52m$ $39.6 = 3.6m$ $m = 11$ <p>(b) $\sigma^2 =$</p> $\frac{(3 \times 42^2) + (6 \times 47^2) + (11 \times 52^2) + (16 \times 57^2) + (10 \times 62^2) + (4 \times 67^2)}{3 + 6 + 11 + 16 + 10 + 4} - 55.6^2$ $= \frac{156\,670}{50} - 55.6^2$ $= 42.04$	 2 1 2 1	 6

No.	Skema Pemarkahan Marking Scheme	Markah Marks	Markah Total Total Marks
11	<p>(a) Lelayang $DEFG$ dan $DABC$, segi tiga EFJ dan ABJ. <i>Kite $DEFG$ and $DABC$, triangle EFJ and ABJ.</i> (Terima mana-mana jawapan yang munasabah) <i>(Accept any reasonable answer)</i></p>	2	
	<p>(b)</p> 	2	
	<p>(c) (i) Q: Pantulan pada garis $x = 3$. <i>Reflection on line $x = 3$.</i></p> <p>(ii) $k = \frac{6}{3}$ $= 2$</p> <p>P: Pembesaran pada titik J dengan faktor skala, $k = 2$. <i>Enlargement at point J with the scale factor, $k = 2$.</i></p>	2	9

No.	Skema Pemarkahan Marking Scheme	Markah Marks	Markah Total Total Marks
12	<p>(a), (b)</p> 	4 5	9

13	<p>(a) Joe = {2, 3, 5, 7}</p> <p>Karl = {2, 4, 6, 8}</p> <p>Liam = {1, 3, 5, 15}</p> <p>(b) (i)</p>  <p>(ii) $(K \cup L)' \rightarrow (K \cup L)' \cup J'$</p> 	1 1 1 3 2	8
----	---	-----------------------	---

No.	Skema Pemarkahan Marking Scheme	Markah Marks	Markah Total Total Marks
14	<p>(a) $p = \text{piza/pizza}, c = \text{kek cawan/cup cake}$</p> $3p + 6c = 45 \text{ ----- } \textcircled{1}$ $7p = 45 + c$ $7p - c = 45 \text{ ----- } \textcircled{2}$ $\begin{pmatrix} 3 & 6 \\ 7 & -1 \end{pmatrix} \begin{pmatrix} p \\ c \end{pmatrix} = \begin{pmatrix} 45 \\ 45 \end{pmatrix}$ $\begin{pmatrix} p \\ c \end{pmatrix} = \frac{1}{3(-1) - 6(7)} \begin{pmatrix} -1 & -6 \\ -7 & 3 \end{pmatrix} \begin{pmatrix} 45 \\ 45 \end{pmatrix}$ $= \frac{1}{-45} \begin{pmatrix} -1(45) + (-6)(45) \\ -7(45) + 3(45) \end{pmatrix}$ $= \frac{1}{-45} \begin{pmatrix} -315 \\ -180 \end{pmatrix}$ $= \begin{pmatrix} 7 \\ 4 \end{pmatrix}$ <p>$p = 7, c = 4$</p>	<p>1</p> <p>1</p> <p>2</p> <p>2</p>	
	<p>(b) Baucar ketiga/<i>Third voucher</i> = $125 - 45 - 45$ = 35</p> $4p + 2c$ $= \begin{pmatrix} 4 & 2 \end{pmatrix} \begin{pmatrix} p \\ c \end{pmatrix}$ $= \begin{pmatrix} 4 & 2 \end{pmatrix} \begin{pmatrix} 7 \\ 4 \end{pmatrix}$ $= 4(7) + 2(4)$ $= 36$ <p>Nilai belian ialah RM36 manakala nilai baucar ialah RM35. <i>The purchase value is RM36 while the voucher value is RM35.</i> ∴ Nilai baucar tidak mencukupi./<i>Voucher value is insufficient.</i></p>	<p>1</p> <p>1</p> <p>1</p>	<p>9</p>

15	<p>(a) $x + y < 36$ $x < y$ (b), (d)(ii)</p>	1 1	
		4	
<p>(c) Tidak kerana titik (14, 10) terletak di luar kawasan rantau berlorek. <i>No because point (14, 10) lies outside the shaded region.</i></p>		2	

(d)	<p>(i) $x + y < 24$</p> <p>(ii) Rujuk graf di atas./Refer the above graph.</p>	1 1	
-----	--	------------	--

$$(d) \bar{x}_s = \frac{254 + 251 + 256 + 260 + 253}{5}$$

$$= 254.8$$

$$\sigma_s = \sqrt{\frac{254^2 + 251^2 + 256^2 + 260^2 + 253^2}{5} - (254.8)^2}$$

$$= 3.059$$

$$\bar{x}_T = \frac{252 + 255 + 258 + 254 + 255}{5}$$

$$= 254.8$$

$$\sigma_T = \sqrt{\frac{252^2 + 255^2 + 258^2 + 254^2 + 255^2}{5} - (254.8)^2}$$

$$= 1.939$$

Raket T. Nilai sisihan piawai yang lebih kecil menunjukkan laju bola tangkis lebih konsisten apabila menggunakan raket T.
Racquet T. A smaller standard deviation value indicates that the shuttlecock speed is more consistent when using racquet T.

17

$$(a) (i) 5 : 35$$

$$= \frac{5}{5} : \frac{35}{5}$$

$$= 1 : 7$$

$$(ii) \frac{7}{35} = \frac{1}{5}$$

(b) $g = \text{guru/teacher}$, $m = \text{murid/pupil}$

$$g = m + 40 \quad \text{--- ①}$$

$$5g + 35m = 3000 \quad \text{--- ②}$$

$$5(m + 40) + 35m = 3000$$

$$5m + 200 + 35m = 3000$$

$$40m = 3000 - 200$$

$$m = 70$$

$$g = 70 + 40$$

$$g = 110$$

Yuran yang perlu dibayar oleh seorang murid ialah RM70, manakala seorang guru ialah RM110.

The fee that has to be paid by a student is RM70, while a teacher is RM110.

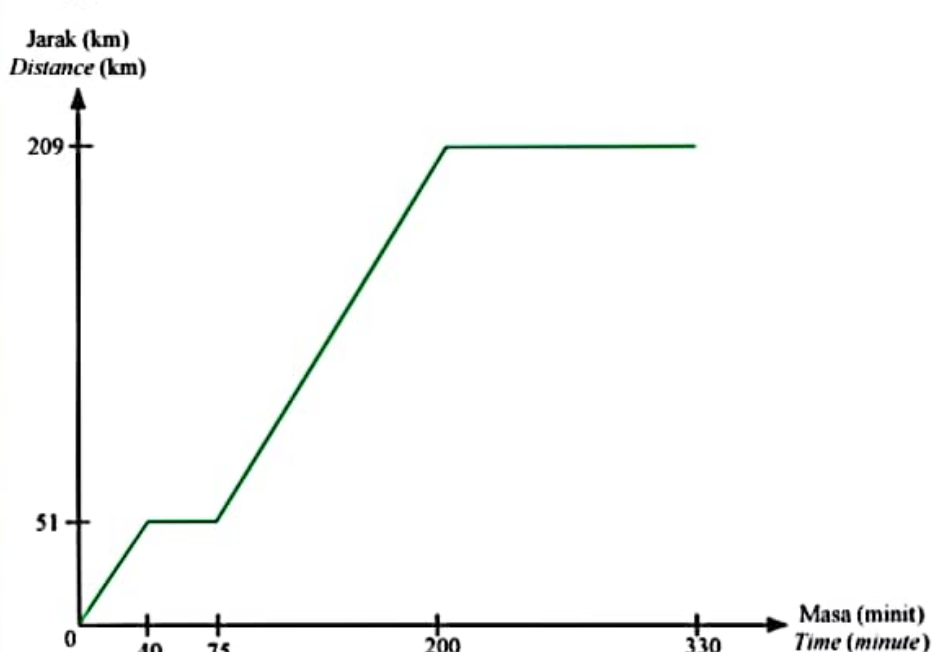
(c) (i) Graf laju-masa : jarak = luas bawah graf
Graph speed-time : distance = area under a graph

Luas bawah graf/Area under a graph

$$= \left(\frac{1}{2} \times 90 \times \frac{[(36 - 8) + 40]}{60} \right) + \left(\frac{1}{2} \times 80 \times \frac{[(200 - 75) + (191 - 79)]}{60} \right)$$

$$= 51 + 158$$

$$= 209 \text{ km}$$

No.	Skema Pemarkahan Marking Scheme	Markah Marks	Markah Total Total Marks
	<p>(ii)</p> 	3	
	<p>(d) Cikgu Linda: $P \rightarrow T \rightarrow S \rightarrow U \rightarrow R \rightarrow Q$ $= 15 + 21 + 20 + 11 + 9$ $= 76$</p> <p>Cikgu Kumar: $P \rightarrow Q \rightarrow R \rightarrow U \rightarrow S \rightarrow T$ $= 13 + 9 + 11 + 20 + 21$ $= 74$</p> <p>Pendapat Cikgu Kumar lebih baik kerana tempoh masa untuk sampai lebih pendek iaitu 74 minit. Ini sesuai dengan matlamat mereka yang mahu menjimatkan masa perjalanan. <i>Cikgu Kumar's opinion is better because the arrival time is shorter which is 74 minutes. This suits the purpose of those who want to save travel time.</i></p>	1 1 1	15