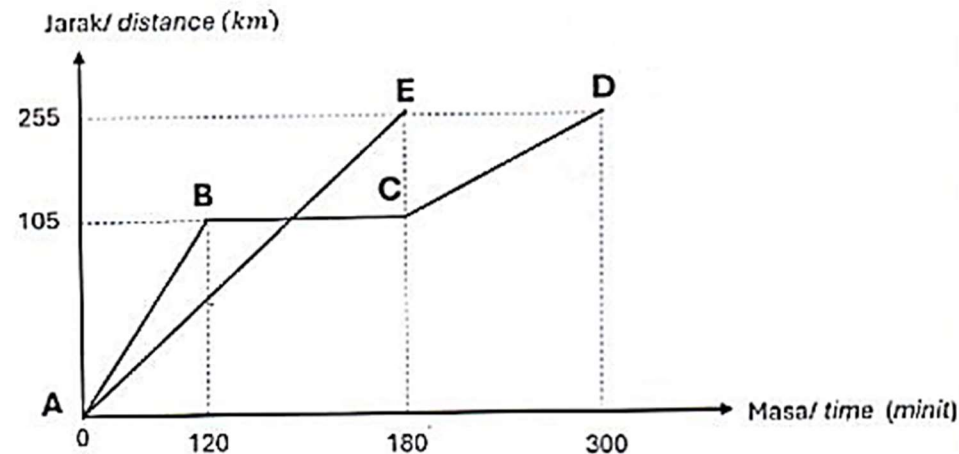


GRAF GERAKAN / GRAPH OF MOTION

1. KELANTAN

Rajah 5 di bawah menunjukkan graf jarak-masa bagi sebuah bas dan sebuah kereta yang bergerak dari Kota Bharu ke Kuala Terengganu. Graf AE dan graf ABCD masing-masing mewakili pergerakan kereta dan bas.

Diagram 5 below shows the distance-time graph for a bus and a car moving from Kota Bharu to Kuala Terengganu. Graph AE and graph ABCD represent the movement of the car and bus respectively.



Rajah 5 / Diagram 5

- (a) Berdasarkan graf jarak-masa tersebut, hitung laju purata bas itu, dalam kmj^{-1} . Based on the distance-time graph, calculate the average speed of the bus, in kmj^{-1} .

[2 markah/ marks]

- (b) Lukis graf laju-masa bagi perjalanan kereta tersebut.

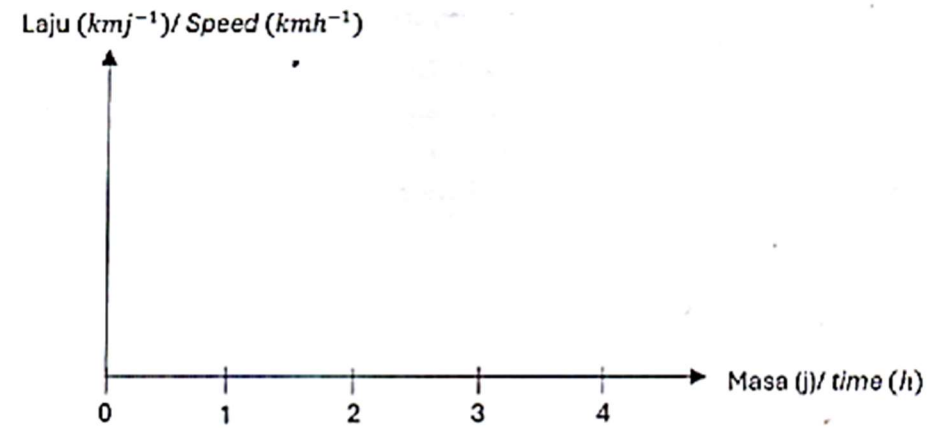
Draw a speed-time graph for the car journey.

[2 markah/ marks]

Jawapan / Answer :

(a)

(b)



2. KEDAH

Rajah 14 pada ruang jawapan menunjukkan graf JK yang mewakili perjalanan kereta yang dipandu Aufa dari bandar B ke bandar A . Pada waktu yang sama, Huda menaiki bas dari bandar A ke bandar B . Bas itu bergerak selama 30 minit, sebelum berhenti di suatu hentian bas yang jaraknya 28 km dari bandar A . Kemudian, selepas 35 minit, bas itu meneruskan perjalanannya sejauh 120 km dengan kelajuan 100 kmj^{-1} dan sampai di bandar B pada minit ke- n .

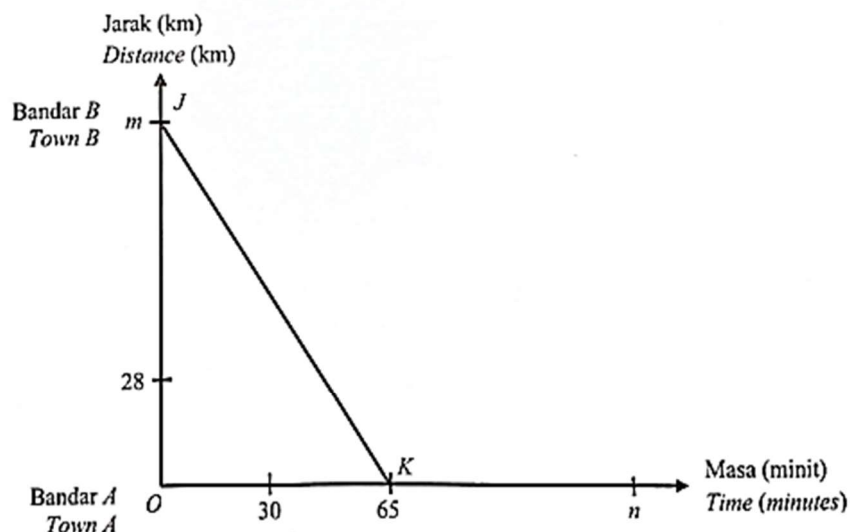
Diagram 14 in the answer space shows the JK graph that represents the journey of the car driven by Aufa from town B to town A . At the same time, Huda took a bus from town A to town B . The bus travelled for 30 minutes, before stopping at a bus stop which is 28 km from town A . Then, after 35 minutes, the bus continues its journey for 120 km at a speed of 100 kmh^{-1} and reaches town B at n^{th} minute.

- (a) Lengkapkan Rajah 14 di ruang jawapan dengan melukis graf jarak-masa bagi perjalanan bas yang dinaiki oleh Huda.

Complete Diagram 14 in the answer space by drawing the distance-time graph of the bus journey taken by Huda.

[6 markah / marks]

Jawapan / Answer:



- (b) Berdasarkan graf di ruang jawapan 14(a)

Base on graph in answer space 14(a)

- (i) Nyatakan nilai m .
State the value of m .
- (ii) Hitung nilai n .
Calculate the value of n .
- (c) Hitung beza laju purata, dalam km j^{-1} , antara kereta yang dipandu Aufa dan bas yang dinaiki Huda bagi keseluruhan perjalanan mereka.
Calculate difference in the average speed, in km h^{-1} , between the car driven by Aufa and the bus taken by Huda for their entire journey.

[3 markah / marks]

Jawapan / Answer:

- (b) (ii) $m =$

(iii)

(c)

3. YIK

Puan Aqilah memandu keretanya sejauh 150 km dari Machang ke Gua Musang untuk melawat bapa saudaranya. Rajah 10 menunjukkan catatan perjalanannya. Puan Aqilah drives her car for 150 km from Machang to Gua Musang to visit her uncle. Diagram 10 shows the notes of his journey.

| Masa Time | 7 Ogos 2024 Sabtu/ Saturday |
|--------------|--|
| 8.00 a.m. | Memulakan perjalanan Start journey |
| 9.04 a.m. | Sarapan pagi di Restoran Warisan di Kuala Krai setelah memandu untuk sejauh 70km Breakfast at Warisan Restaurant in Kuala Krai after driving for 70km |
| 9.30 a.m. | Meneruskan perjalanan untuk 80km lagi Continue journey for another 80km |
| 10.15 a.m. | Tiba di rumah bapa saudaranya Arrive at her uncle's house |

Rajah 10
Diagram 10

Rajah 10 menunjukkan graf jarak-masa.
Diagram 10 shows the distance-time graph.

- (i) Nyatakan nilai m dan nilai n .
State the value of m and of n .

[1 markah]
[1 marks]

- (ii) Lengkapkan graf itu untuk menggambarkan keseluruhan perjalanan Puan Aqilah.
Complete the graph to represent Puan Aqilah's whole journey.

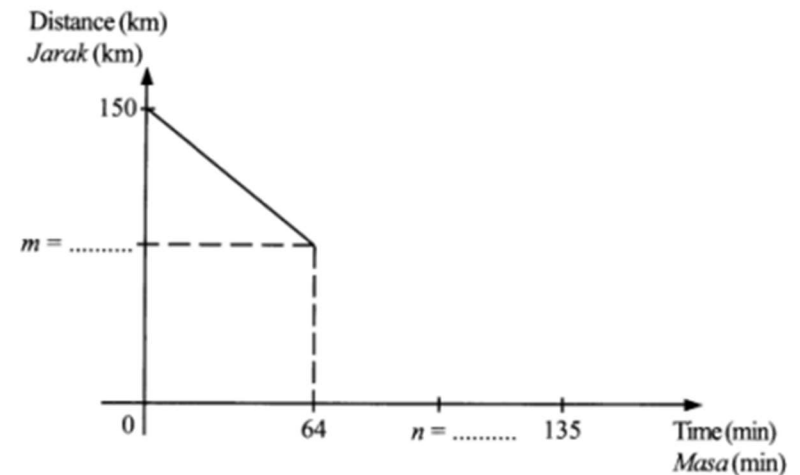
[1 markah]
[1 marks]

- (iii) Hitung purata laju, dalam km h^{-1} , bagi keseluruhan perjalanan.
Calculate the average speed, in km h^{-1} , for the whole journey.

[2 markah]
[2 marks]

Jawapan/Answer :

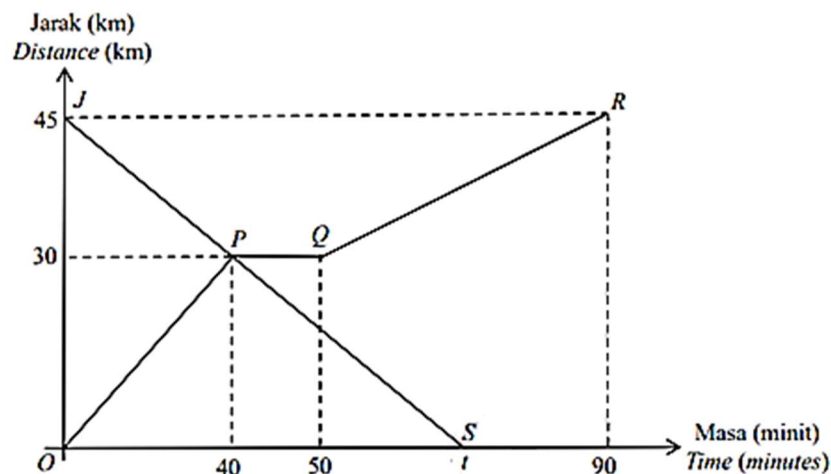
(i), (ii)



(iii)

4. PAHANG SET 1

Rajah 7 menunjukkan graf jarak-masa bagi pergerakan dua buah motosikal.
Diagram 7 shows a distance-time graph for the movement of two motorcycles.



Rajah 7 / Diagram 7

$OPQR$ ialah pergerakan motosikal Ravi dari Kuantan ke Pekan manakala JPS ialah pergerakan motosikal Syafiq dari Pekan ke Kuantan. Kedua-duanya melalui jalan yang sama.

$OPQR$ is Ravi's motorcycle movement from Kuantan to Pekan while JPS is Syafiq's motorcycle movement from Pekan to Kuantan. Both use the same route.

- (a) Nyatakan jarak, dalam km, dari Pekan apabila kedua-dua mereka bertemu.
State the distance, in km, from Pekan when both met. [1 markah / marks]
- (b) Hitung
Calculate
- (i) laju, dalam kmj^{-1} , motosikal Ravi pada 40 minit terakhir,
the speed, in kmh^{-1} , of Ravi's motorcycle in the last 40 minutes, [2 markah / marks]
- (ii) jarak, dalam km, motosikal Ravi dari Kuantan pada minit ke 66.
the distance, in km, of Ravi from Kuantan at 66th minute. [2 markah / marks]
- (c) Diberi laju purata motosikal Syafiq melebihi laju purata motosikal Ravi sebanyak 10 kmj^{-1} . Hitung nilai t .
Given the average speed of Syafiq's motorcycle exceeded the average speed of Ravi's motorcycle by 10 kmh^{-1} . Calculate the value of t . [3 markah / marks]

Jawapan / Answer

(a)

(b)(i)

(ii)

5. MELAKA

Keluarga Encik Farid balik ke kampung pada cuti perayaan Hari Raya Aidilfitri di Johor dengan menaiki sebuah kereta.

Encik Farid's family returned to the village during the Hari Raya Aidilfitri holiday in Johor by car.

- (a) Jadual 6 menunjukkan sebahagian maklumat perjalanan Encik Farid. Jarak di antara bandar Melaka dan bandar Batu Pahat ialah 90 km.

Table 6 shows an information of Encik Farid's journey. The distance between Malacca city and Batu Pahat city is 90 km.

| Masa Time | Huraian Description |
|--------------|---|
| 8.10 a.m. | Bertolak dari Bandar Melaka <i>Depart from Malacca city</i> |
| 8.55 a.m. | Berhenti di bandar Muar selepas memandu sejauh 45 km. <i>Stop at Muar city after driving for 45 km</i> |
| 9.10 a.m. | Bergerak dari bandar Muar ke bandar Batu Pahat <i>Moves from Muar city to Batu Pahat city</i> |
| 10.05 a.m. | Tiba di bandar Batu Pahat <i>Arrive at Batu Pahat city</i> |

Jadual 6 / Table 6

- (i) Isi petak kosong pada Rajah 7 di ruang jawapan bagi menggambarkan keseluruhan perjalanan.
Fill in the blanks in Diagram 7 in the answer space to represent the whole journey.

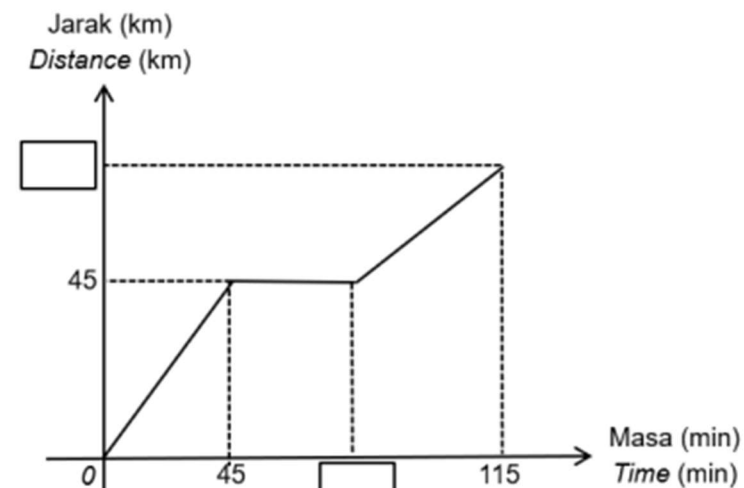
[2 markah / marks]

- (ii) Hitung laju purata, dalam kmj^{-1} , keseluruhan perjalanan.
Calculate the average speed, in kmh^{-1} , of the whole journey.

[2 markah / marks]

Jawapan / Answer :

- (a) (i)



Rajah 7 / Diagram 7

- (ii)

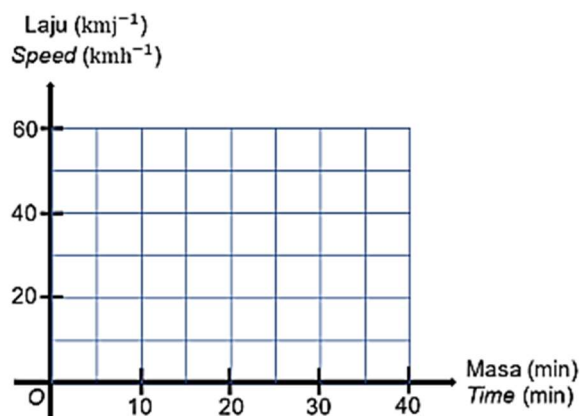
6. MELAKA

Adib mengalami kecederaan di kaki akibat terjatuh ketika menunggang basikal. Bapanya telah memandu kereta menuju ke farmasi berdekatan untuk membeli ubat dengan laju awal keretanya ialah 40 kmj^{-1} . Keretanya memecut dengan pecutan 120 kmj^{-2} dalam masa 10 minit. Kemudian, kereta itu bergerak dengan laju seragam selama 20 minit. Akhirnya kereta bapa Adib mengalami nyahpecutan dan berhenti dalam tempoh 5 minit. Adib suffered a leg injury due to a falling while riding a bicycle. His father drove to a nearby pharmacy to buy medicine at an early speed of 40 kmh^{-1} . The car accelerates with an acceleration of 120 kmh^{-2} in 10 minutes. Then, the car moved at a uniform speed for 20 minutes. Finally, Adib's father's car decelerated and stopped within 5 minutes.

- (i) Lengkapkan graf laju-masa dalam Rajah 8 di ruang jawapan untuk menggambarkan pergerakan kereta bapa Adib bagi keseluruhan perjalanannya. Complete the speed-time graph in Diagram 8 in the answer space to describe the movement of Adib's father's car for the whole journey. [3 markah / marks]
- (ii) Hitung jarak yang dilalui bagi 10 minit yang pertama. Calculate the distance traveled for the first 10 minutes. [2 markah / marks]

Jawapan / Answer :

(i)



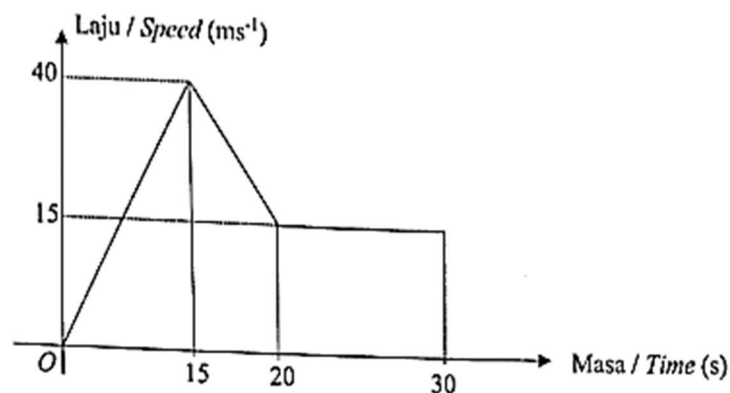
Rajah 8 / Diagram 8

(ii)

7. N9

Rajah 4 menunjukkan graf laju-masa bagi suatu zarah dalam tempoh 30 saat.

Diagram 4 below shows the velocity-time graph of a particle over a period of 30 seconds.



Rajah 4
Diagram 4

- (a) Nyatakan laju seragam, dalam ms^{-1} zarah itu. State the uniform speed, in ms^{-1} , of the particle.
- (b) Hitung jarak perjalanan yang dilalui oleh zarah ini dalam masa 20 saat pertama. Calculate the distance travelled by this particle in the first 20 seconds.

[4 markah]
[4 marks]

Jawapan / Answer :

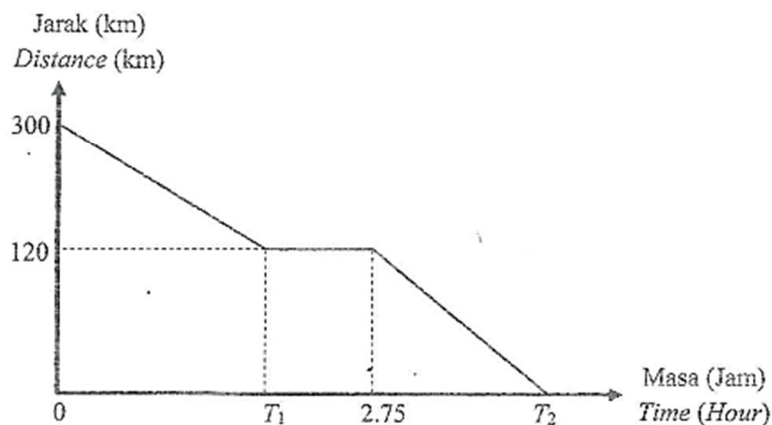
(a)

(b)

8. SABK

Rajah 3 menunjukkan graf jarak-masa bagi pergerakan sebuah bas dari Bandar P ke Bandar S sejauh 300 km. Bas itu akan melalui Bandar Q untuk menurunkan dan menaikkan penumpang.

Diagram 3 shows a distance-time graph for a movement of a bus from town P to town R with distance 300 km. The bus will pass through town Q to drop and pick the passengers.



Rajah 3

Hitung

Calculate

(a) jarak, dalam km, Bandar P ke Bandar Q .

the distance, in km, from Town P to Town Q .

[1 markah]

[1 mark]

(b) nilai T_1 , jika bas itu berhenti selama 45 minit di Bandar Q .

the value of T_1 , if the bus stops for 45 minutes at Town Q .

[2 markah]

[2 marks]

(c) nilai T_2 , jika laju purata keseluruhan perjalanan bas tersebut ialah 80 kmj^{-1} .

the value of T_2 , if the average speed of the entire journey of the bus is 80 kmh^{-1} .

[2 markah]

[2 marks]

Jawapan /Answer:

(a)

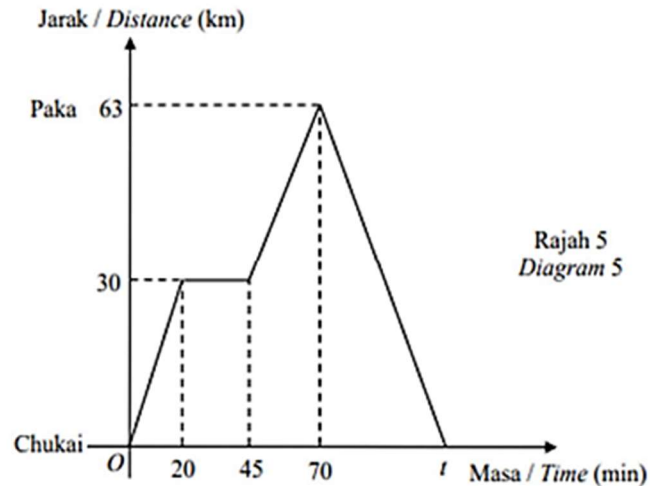
(b)

(c)

9. TERENGGANU MPP3

Rajah 5 menunjukkan graf jarak-masa bagi perjalanan Arman dari rumahnya di Chukai ke pejabatnya di Paka.

Diagram 5 shows the distance-time graph for Arman's journey from his house in Chukai to his office in Paka.



- (a) Nyatakan tempoh masa, dalam minit, ketika kereta Arman berada dalam keadaan pegun.

State the length of time, in minutes, when his car is stationary.

- (b) Hitung nilai t , diberi laju kereta untuk perjalanan balik ialah 84 km j^{-1} . Seterusnya tentukan bahawa Arman sempat balik sebelum pukul 6.00 petang jika dia bertolak pada pukul 5.00 petang. Justifikasikan jawapan anda dengan pengiraan berangka.

Calculate the value of t , given that the speed of the car for his returned journey is 84 km h^{-1} . Next, determine that Arman has time to return before 6.00 pm if he leaves at 5.00 pm. Justify your answer with numerical calculations.

[4 markah]

[4 marks]

Jawapan / Answer :

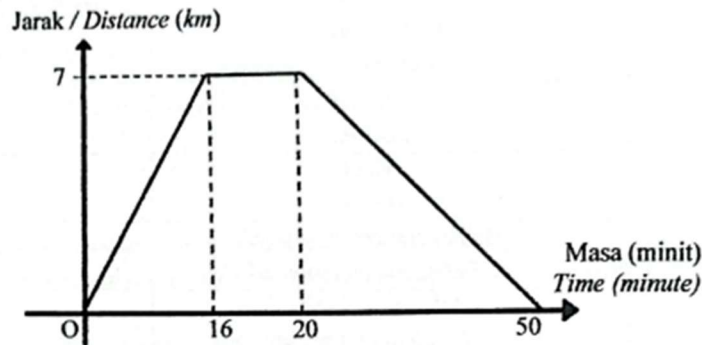
(a)

(b)

10. MUAR JOHOR

Rajah 6 menunjukkan graf jarak-masa bagi Encik Samad melakukan aktiviti berjogging. Maklumat berkenaan lariannya adalah merujuk kepada graf dibawah.

Diagram 6 shows the distance-time graph for Encik Samad to do a jogging activity. The information regarding the run is referred to the graph below.



Rajah 4
Diagram 4

- (a) Hitung tempoh masa, dalam minit, Encik Samad berehat.
Calculate the length of time, in minutes, Encik Samad has been resting.
[1 markah/ mark]
- (b) Hitung laju, dalam kmh^{-1} , dalam tempoh 30 minit terakhir. Seterusnya huraikan pergerakan tersebut.
Calculate the speed, in kmh^{-1} , in the last 30 minutes. Then describe the movement.
[3 markah/ marks]

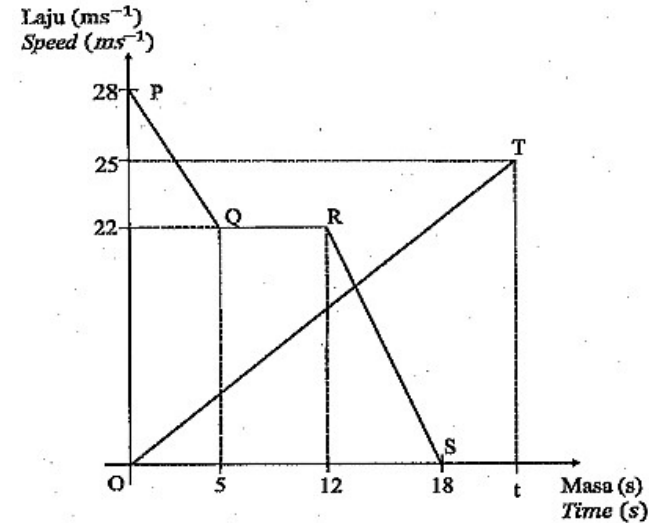
Jawapan/ Answer:

(a)

(b)

11. PPT PAHANG

Rajah 1 menunjukkan graf laju-masa bagi gerakan sebuah kereta yang dipandu oleh Puan Liyanna, PQRS dan sebuah motosikal yang ditunggang oleh Encik Armada, OT. Diagram 1 shows a speed-time graph for the motion of a car drove by Puan Liyanna, PQRS and a motorcycle rode by Encik Armada, OT.



Rajah 1
Diagram 1

- (a) Huraikan gerakan kereta Puan Liyanna antara saat ke-5 hingga saat ke-12.
Describe the motion of Puan Liyanna's car between the 5th second and the 12th second.
[1 markah /mark]
- (b) Diberi bahawa jarak yang dilalui oleh Puan Liyanna adalah sama dengan jarak yang dilalui oleh Encik Armada.
Hitung nilai t.
It is given that the distance travelled by Puan Liyanna is equal to the distance travelled by Encik Armada.
Calculate the value of t.

Jawapan/ Answer:

[3 markah /marks]

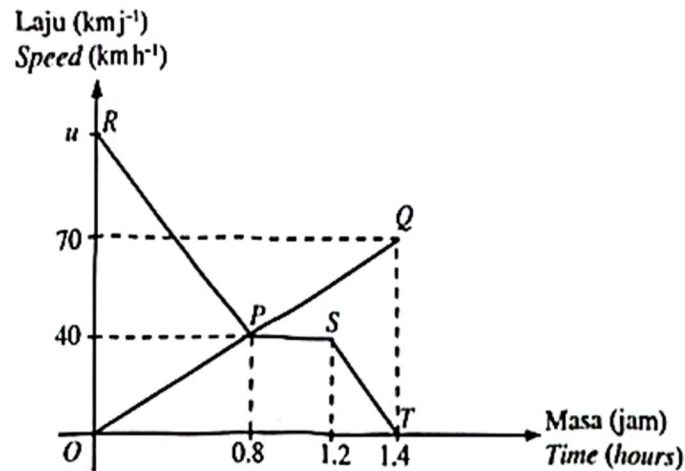
(a)

(b)

12. SPMU

Rajah 7 menunjukkan graf laju-masa bagi gerakan sebuah kereta dan sebuah van dalam tempoh 1.4 jam. Graf OPQ menunjukkan gerakan kereta. Graf $RPST$ menunjukkan gerakan van.

Diagram 7 shows the speed-time graph for the motion of a car and a van in the duration of 1.4 hours. Graph OPQ shows the motion of the car. Graph $RPST$ shows the motion of the van.



Rajah 7
Diagram 7

- (a) Nyatakan laju seragam, dalam km j^{-1} , bagi van. [1 markah]
State the uniform speed, in km h^{-1} of the van. [1 mark]
- (b) Hitung pecutan, dalam km j^{-2} , bagi kereta. [2 markah]
Calculate the acceleration, in km h^{-2} , of the car. [2 marks]
- (c) Cari nilai u , dalam km j^{-1} , jika jumlah jarak yang dilalui oleh van untuk keseluruhan perjalanan ialah 84 km. [3 markah]
Find the value of u , in km h^{-1} , if the total distance travelled by the van for the whole journey is 84 km. [3 marks]
- (d) Seterusnya, hitung beza antara jarak yang dilalui, dalam km, bagi kedua-dua kenderaan itu untuk 0.8 jam pertama. [3 markah]
Hence, calculate the difference between the distance travelled, in km, by both vehicles for the first 0.8 hours. [3 marks]

Jawapan / Answer :

(a)

(b)

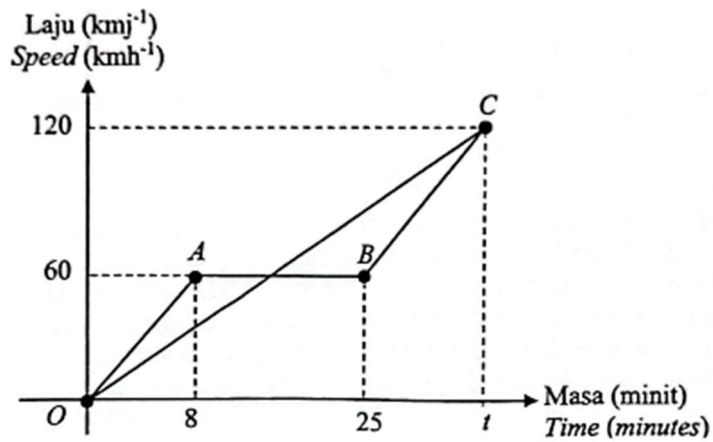
(c)

(d)

13. TERENGGANU MPP2

Rajah 4 menunjukkan graf laju-masa bagi satu perjalanan sebuah kereta dan sebuah motosikal dari Marang ke Kuala Nerus. OC mewakili perjalanan sebuah kereta dan $OABC$ mewakili perjalanan sebuah motosikal dalam t minit.

Diagram 4 shows the speed-time graph for the journey of a car and a motorcycle from Marang to Kuala Nerus. OC represents the journey of the car and $OABC$ represents the journey of the motorcycle in t minutes.



Rajah 4
Diagram 4

- (a) Nyatakan tempoh masa, dalam minit, motosikal itu bergerak dengan laju seragam.
State the duration of time, in minutes, the motorcycle moves in uniform speed.
- (b) Hitung kadar perubahan laju, dalam kmh^{-2} , motosikal itu dalam tempoh 8 minit pertama.
Calculate the rate of change of speed, in kmh^{-2} , of the motorcycle in the first 8 minutes.
- (c) Hitung nilai bagi t , jika jarak yang dilalui oleh kereta dan motosikal adalah sama.
Calculate the value of t , if the distance travelled by the car and the motorcycle are equal.

[6 markah]
[6 marks]

Jawapan / Answer :

(a)

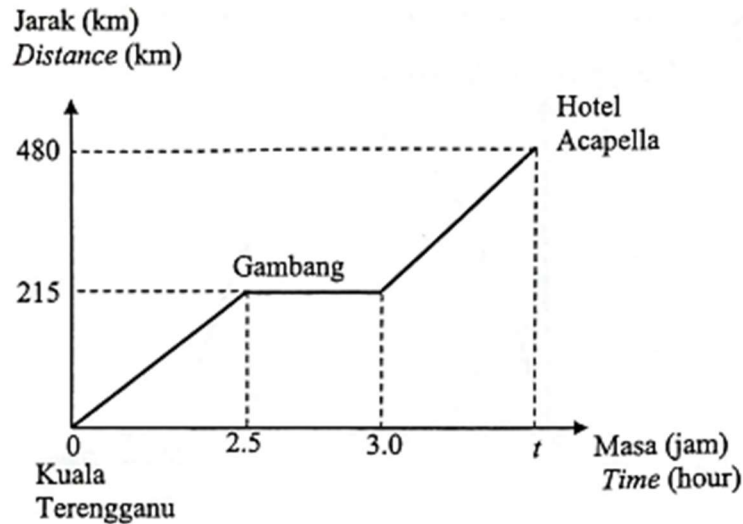
(b)

(c)

14. TERENGGANU MPP2

Asmadi telah menghadiri satu mesyuarat di Hotel Acapella, Shah Alam. Beliau bertolak dari Kuala Terengganu dan berhenti seketika di Gambang untuk sarapan pagi. Rajah 12 menunjukkan graf jarak-masa bagi perjalanannya.

Asmadi attended a meeting at Hotel Acapella, Shah Alam. He left Kuala Terengganu and stopped for a while in Gambang for breakfast. Diagram 12 shows the distance-time graph of his journey.



Rajah 12
Diagram 12

- (i) Nyatakan jarak, dalam km, yang dilalui Asmadi dari Gambang ke Hotel Acapella.

State the distance, in km, travelled from Gambang to Hotel Acapella.

[1 markah]

[1 mark]

- (ii) Hitung laju, dalam km/j, perjalanan dari Kuala Terengganu ke Gambang .

Calculate the average speed, in km/h, for the whole journey.

[2 markah]

[2 marks]

- (iii) Diberi laju purata bagi keseluruhan perjalanan ialah 80 km/j.

Cari nilai t .

Given that the average speed for the whole journey is 80 km/h. Find the value of t .

[2 markah]

[2 marks]

Jawapan / Answer :

(i)

(ii)

(iii)

15. PPT KELANTAN

Pada tahun 2023, Puan Anita telah disahkan mengidap penyakit jantung dan telah mendapatkan rawatan di sebuah hospital di Kota Bharu. Jarak rumahnya dengan hospital adalah 50 km.

In 2023, Madam Anita was diagnosed with heart disease and was treated at a hospital in Kota Bharu. The distance between her house and the hospital is

50 km.

Jadual 4 menunjukkan catatan perjalanan beliau dari rumahnya ke hospital.

Table 4 shows the note of her journey from his home to the hospital.

| Masa Time | Khamis/Thursday 25 Ogos 2023/25 August 2023 |
|--------------|--|
| 8.00 a.m. | Memulakan perjalanan dari rumahnya. <i>Start journey from her house.</i> |
| 8.20 a.m. | Berhenti di sebuah restoran untuk bersarapan setelah memandu sejauh 15 km. <i>Stop at a restaurant to have breakfast after driving for 15 km.</i> |
| 9.00 a.m. | Meneruskan perjalanan untuk 35 km lagi <i>Continue journey for another 35 km</i> |
| 9.30 a.m. | Tiba di hospital. <i>Arrive at the hospital.</i> |

Jadual 4/ Table 4

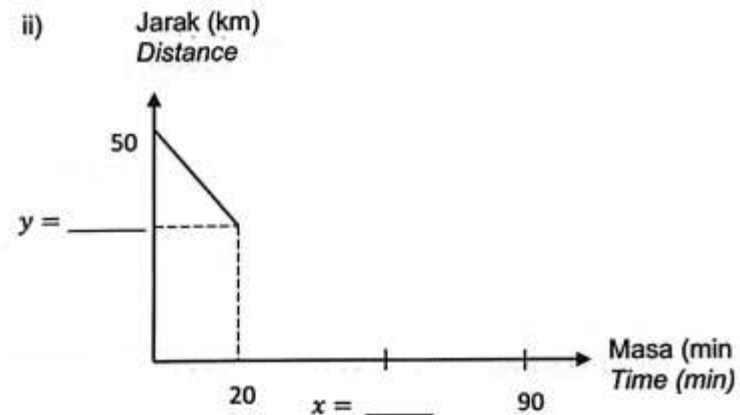
Rajah 8 di ruang jawapan menunjukkan graf jarak-masa. *Diagram 8 in the answer space shows the distance-time graph.*

- (i) Nyatakan nilai x dan nilai y .
States the values of x and y .
- (ii) Lengkapkan graf di ruang jawapan untuk mewakili keseluruhan perjalanan Puan Anita.
Complete the graph in the answer space to represent Puan Anita's whole journey.

[4 markah/marks]

Jawapan/Answer:

(i) x : _____ y : _____



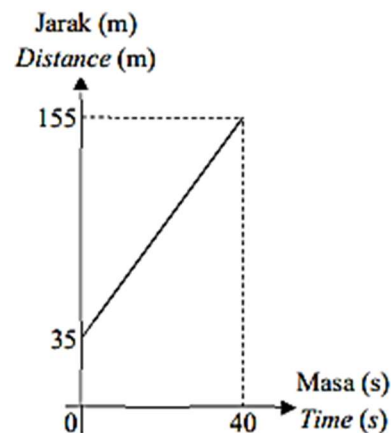
Rajah 8 / Diagram 8

(ii)

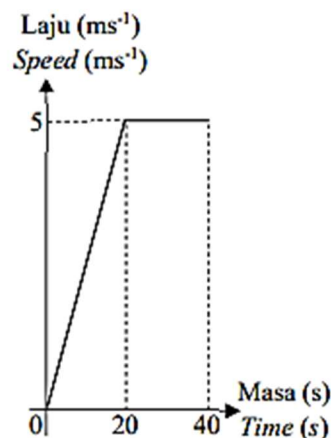
16. PPT KEDAH

Rajah 7.1 menunjukkan graf jarak-masa bagi zarah P dalam tempoh 40 saat dan Rajah 7.2 menunjukkan graf laju-masa bagi zarah Q dalam tempoh 40 saat.

Diagram 7.1 shows the distance-time graph for particle P in 40 seconds and Diagram 7.2 shows the speed-time graph for particle Q in 40 seconds.



Rajah / Diagram 7.1



Rajah / Diagram 7.2

Jawapan / Answer :

(a)

(b)

Hitung / Calculate,

- (a) laju zarah P , dalam ms^{-1} untuk tempoh 40 saat.
the speed of particle P , in ms^{-1} for 40 seconds.
- (b) beza antara jarak yang dilalui oleh zarah P dan zarah Q dalam tempoh 40 saat.
the difference between the distance traveled by particle P and particle Q in 40 seconds.

[5 markah/ marks]

Hitung / Calculate,

- (a) laju zarah P , dalam ms^{-1} untuk tempoh 40 saat.
the speed of particle P , in ms^{-1} for 40 seconds.
- (b) beza antara jarak yang dilalui oleh zarah P dan zarah Q dalam tempoh 40 saat.
the difference between the distance traveled by particle P and particle Q in 40 seconds.

[5 markah/ marks]

SKEMA JAWAPAN :

1. KELANTAN

| | | | |
|-----|--|---|---|
| (a) | $\frac{255}{\left(\frac{300}{60}\right)}$ | 1 | |
| | 51 | 1 | |
| (b) | Laju (kmj^{-1}) / Speed (kmh^{-1}) | | 4 |
| | | 2 | |

2. KEDAH

| | | | |
|-----|---|----|--|
| (a) | | | |
| | Garis padu graf garis membentuk segi tiga, segi empat dan trapezium dilukis dengan betul dengan menggunakan pembaris. | 1m | |
| | Kedudukan tepat pada koordinat (30, 28), (65, 28) <u>dan</u> (n, m). | 1m | |

| | | | |
|-----|------|---|----|
| (b) | (i) | 148 | 1m |
| | (ii) | $\frac{120}{100} \times 60 + 65$ <u>atau</u> setara | 2m |
| | | <u>Nota:</u> $\frac{120}{100} \times 60$ terima 1m. | 1m |
| | | 137 | |
| (c) | | $\frac{148}{\left(\frac{65}{60}\right)} \square \frac{148}{\left(\frac{137}{60}\right)}$ <u>atau</u> setara | 2m |
| | | <u>Nota:</u> $\frac{148}{\left(\frac{65}{60}\right)}$ <u>atau</u> $\frac{148}{\left(\frac{137}{60}\right)}$ <u>atau</u> $\frac{148}{65}$ <u>atau</u> $\frac{148}{137}$ dilihat, terima 1m. | 1m |
| | | 71.8 | |

3. YIK

| | | | |
|-------|------|---|----|
| (i) | (ii) | $m = 80$ dan $n = 90$ | K1 |
| | | | K1 |
| (iii) | | $\frac{150}{135/60}$ <u>atau</u> $\frac{150}{2.25}$ | K1 |
| | | 66.67 kmj^{-1} | N1 |

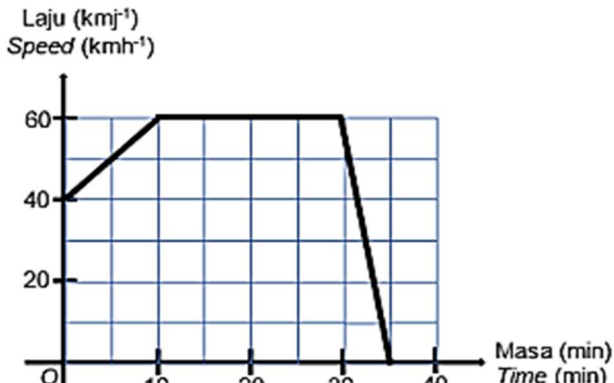
4. PAHANG SET 1

| | | | |
|-----|---|---|---|
| (a) | 15 | 1 | 1 |
| (b) | (i) $\frac{45-30}{(90-50)/60}$ | 1 | |
| | 22.5 | 1 | 2 |
| | (ii) $\frac{45-30}{90-50} = \frac{45-x}{90-66}$ | 1 | |
| | 36 | 1 | 2 |
| (c) | $\frac{45}{t/60} - \frac{45}{90/60} = 10$ | 2 | |
| | 67.5 | 1 | 3 |
| | | | 8 |

5. MELAKA

| | | | |
|------|-------------------------------------|---|---|
| (i) | $\frac{90}{60}$ | 1 | |
| (ii) | $\frac{90}{(\frac{115}{60})}$ | 1 | |
| | 46.96 <i>atau</i> $46\frac{22}{23}$ | 1 | 4 |

6. MELAKA

| | | | |
|-----|---|---|--|
| (i) |  | 3 | |
|-----|---|---|--|

| | | | |
|------|--|---|---|
| (ii) | $\frac{1}{2} \times (40 + 60) \times \left(\frac{10}{60}\right)$ | 1 | |
| | 8.333 <i>atau</i> $\frac{25}{3}$ <i>atau</i> $8\frac{1}{3}$ | 1 | 5 |

7. N9

| | |
|--|----|
| 15 | P1 |
| $\left(\frac{1}{2} \times 15 \times 40\right) + \left(\frac{1}{2} \times (15 + 40) \times 5\right)$ | K2 |
| <u>Nota:</u> $\left(\frac{1}{2} \times 15 \times 40\right)$ ATAU $\left(\frac{1}{2} \times (15 + 40) \times 5\right)$ beri K1 | |
| $\frac{875}{2}$ <i>atau</i> $437\frac{1}{2}$ | N1 |

8. SABK

| | | |
|-----|------------------|---|
| (a) | 180 | 1 |
| (b) | $2.75 - 0.75$ | 1 |
| | 2 | 1 |
| (c) | $\frac{300}{80}$ | 1 |
| | 3.75 | 1 |

9. TERENGGANU MPP3

| | | |
|-----|---|----|
| (a) | 25 | U1 |
| (b) | $84 = \frac{63}{\left(\frac{t-70}{60}\right)}$ | W1 |
| | 115 minit @ 1 jam 55 minit | W1 |
| | Ya kerana Arman dijangka sampai pada jam 5.45 petang atau setara <i>Yes because Arman is expected to arrive at 5.45 pm or equivalent</i> | V1 |

10. MUAR JOHOR

| | | |
|-----|---|----|
| (a) | 4 | P1 |
| (b) | $\frac{7-0}{\left(\frac{20-50}{60}\right)}$ atau $\frac{7}{\left(\frac{30}{60}\right)}$ atau setara | K1 |
| | 14 | N1 |
| | Jogging sejauh 7km dengan laju 14km/j | N1 |

11. PPT PAHANG

| | |
|--|---|
| (a) Kereta bergerak dengan laju seragam dalam tempoh 7 saat. | 1 |
| (b) $\left[\frac{1}{2} \times (22 + 28) \times 5\right] + \left[\frac{1}{2} \times (13 + 7) \times 22\right] = \frac{1}{2} \times 25 \times t$ | 2 |
| 27.6 | 1 |

12. SPMU

| | |
|-----|---|
| (a) | 40 |
| (b) | $\frac{70}{1.4}$ = 50 |
| (c) | $\frac{1}{2}(4+40) \times 0.8 + \frac{1}{2}(0.4+0.6) \times 40 = 84$ = 120 |
| (d) | $\frac{1}{2}(40+120) \times 0.8 - \frac{1}{2} \times 0.8 \times 40$ = 48 |

13. TERENGGANU MPP2

| | | |
|-----|--|----------|
| (a) | 17 | U1 |
| (b) | $\frac{60}{\left(\frac{8}{60}\right)}$ 450 | W1 V1 |
| (c) | $\left(\frac{1}{2} \times \left(\frac{17+25}{60}\right) \times 60\right) + \left(\frac{1}{2} \times (60+120) \times \left(\frac{t-25}{60}\right)\right) = \left(\frac{1}{2} \times \frac{t}{60} \times 120\right)$ | W2 |
| | 33 | V1 |

14. TERENGGANU MPP2

| | | |
|-------|---|----------|
| (i) | 265 | U1 |
| (ii) | $\frac{215-0}{2.5-0}$ atau setara 86 | W1 V1 |
| (iii) | $80 = \frac{480}{t}$ atau setara 6 | W1 V1 |

15. PPT KELANTAN

| | | |
|-----|---|---|
| i- | x = 60 | 1 |
| | y = 35 | 1 |
| ii- | <p>Jarak (km) Distance (km)</p> <p>50 y = 35 20 x = 60 90 Masa (min) Time (min)</p> | 2 |

16. PPT KEDAH

| | | |
|-----|---|----|
| (a) | $\frac{155-35}{40}$ | 1m |
| | 3 | 1m |
| (b) | $\frac{1}{2} \times (40+20) \times 5$ <u>atau</u> 150 | 1m |
| | 150-120 | 1m |
| | 30 | 1m |