

JABATAN PELAJARAN NEGERI SABAH

SIJIL PELAJARAN MALAYSIA (SET B)
1449/1

MATEMATIK
Kertas 1
2021

1 Jam 30 Minit
minit

Satu jam dan tiga puluh

JANGAN BUKA KERTAS SOALANINI SEHINGGA DIBERITAHU

8. Kertas soalan ini mengandungi **40** soalan.
This question paper consists of 40 questions.
9. Jawab **semua** soalan.
Answer all questions.
10. Tiap-tiap soalan diikuti oleh empat pilihan jawapan, iaitu **A**, **B**, **C** dan **D**. Bagi setiap soalan, pilih **satu** jawapan sahaja.
Answer each question by blackening the correct space on the answer sheet.
11. **Hitamkan** jawapan anda pada kertas jawapan objektif yang disediakan.
Blacken only one space for each question.
12. Jika anda hendak menukar jawapan, padamkan tanda yang telah dibuat. Kemudian, hitamkan jawapan yang baharu.
If you wish to change your answer, erase the blackened mark that you have done. Then blacken the space for the new answer.
13. Rajah yang mengiringi soalan tidak dilukis mengikut skala kecuali dinyatakan.
The diagram in the questions provided are not drawn to scale unless stated.
14. Anda dibenarkan menggunakan kalkulator saintifik.
You may use a non-programmable scientific calculator.

Kertas soalan ini mengandungi **25** halaman bercetak.

| RUMUS MATEMATIK MATHEMATICAL FORMULAE | | | |
|--|---|----|--|
| PERKAITAN RELATIONS | | | |
| Rumus-rumus berikut boleh membantu anda untuk menjawab soalan. Simbol-simbol yang diberi adalah yang biasa digunakan. <i>The following formulae may be helpful in answering the questions. The symbols given are the ones commonly used</i> | | | |
| 1 | $a^m \times a^n = a^{m+n}$ | 14 | Teorem Pithagoras / Pythagoras Theorem $c^2 = a^2 + b^2$ |
| 2 | $a^m \div a^n = a^{m-n}$ | 15 | $P(A) = \frac{n(A)}{n(S)}$ |
| 3 | $(a^m)^n = a^{mn}$ $(a^m)^n = a^{mn}$ | 16 | $P(A') = 1 - P(A)$ |
| 4 | $A^{-1} = \frac{1}{ad-bc} \begin{pmatrix} d & -b \\ -c & a \end{pmatrix}$ $A^{-1} = \frac{1}{ad-bc} \begin{pmatrix} d & -b \\ -c & a \end{pmatrix}$ | 17 | $m = \frac{y_2 - y_1}{x_2 - x_1}$ |
| 5 | Jarak / Distance = $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$ | 18 | $m = -\frac{\text{pintasan-}y}{\text{pintasan-}x}$ $m = -\frac{y\text{-intercept}}{x\text{-intercept}}$ |
| 6 | Titik Tengah / midpoint $(x, y) = \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$ | 19 | Faedah mudah / Simple interest, $I = Prt$ |
| 7 | Purata laju = $\frac{\text{jarak yang dilalui}}{\text{masa yang diambil}}$ Average speed = $\frac{\text{distance travelled}}{\text{time taken}}$ | 20 | Nilai matang / Maturity value $MV = P \left(1 + \frac{r}{n}\right)^n$ |
| 8 | Min = $\frac{\text{hasil tambah nilai data}}{\text{bilangan data}}$ Mean = $\frac{\text{sum of data}}{\text{number of data}}$ | 21 | Jumlah bayaran balik / Total amount payable $A = P + Prt$ |
| 9 | Min = $\frac{\text{hasil tambah (nilai titik tengah kelas} \times \text{kekerapan})}{\text{hasil tambah kekerapan}}$ Mean = $\frac{\text{sum of (midpoint} \times \text{frequency})}{\text{sum of frequencies}}$ | | |
| 10 | Varians / Variance, $\sigma^2 = \frac{\Sigma(x - \bar{x})^2}{N} = \frac{\Sigma x^2}{N} - \bar{x}^2$ | | |
| 11 | Varians / Variance, $\sigma^2 = \frac{\Sigma f(x - \bar{x})^2}{\Sigma f} = \frac{\Sigma fx^2}{\Sigma f} - \bar{x}^2$ | | |
| 12 | Sisihan piawai / Standard deviation, $\sigma = \sqrt{\frac{\Sigma(x - \bar{x})^2}{N}} = \sqrt{\frac{\Sigma x^2}{N} - \bar{x}^2}$ | | |
| 13 | Sisihan piawai / Standard deviation, $\sigma = \sqrt{\frac{\Sigma f(x - \bar{x})^2}{\Sigma f}} = \sqrt{\frac{\Sigma fx^2}{\Sigma f} - \bar{x}^2}$ | | |

**BENTUK DAN RUANG
SHAPES AND SPACE**

1 Luas Trapezium = $\frac{1}{2} \times$ Hasil tambah dua sisi selari \times Tinggi

$$Area\ of\ Trapezium = \frac{1}{2} \times Sum\ of\ parallel\ lines \times Height$$

2 Lilitan bulatan= $\pi d = 2\pi r$
Circumference of circle = $\pi d = 2\pi r$

3 Luas bulatan= πj^2
Area of circle = πr^2

4 Luas permukaan melengkung silinder= $2\pi jt$
Curved surface area of cylinder = $2\pi rh$

5 Luas permukaan sfera= $4\pi j^2$
Surface area of sphere = $4\pi r^2$

6 Isipadu silinder = $\pi j^2 t$
Volume of cylinder = $\pi r^2 h$

7 Isipadu prisma tegak=luas keratan rentas \times panjang
Volume of right prism =cross sectional area \times length

8 Isipadu Sfera = $\frac{4}{3}\pi j^3$

9 Isipadu Kon = $\frac{1}{3}\pi j^2 t$

$$Volume\ of\ Sphere = \frac{4}{3}\pi r^3$$

$$Volume\ of\ Cone = \frac{1}{3}\pi r^2 h$$

10 Isipadu Piramid Tegak = $\frac{1}{3} \times$ Luas tapak \times Tinggi

$$Volume\ of\ Right\ Pyramid = \frac{1}{3} \times Area\ of\ base \times Height$$

11 Hasil tambah sudut pedalaman poligon = $(n - 2) \times 180^\circ$
Sum of interior angles of a polygon = $(n - 2) \times 180^\circ$

12 $\frac{\text{Panjang lengkok}}{\text{Lilitan bulatan}} = \frac{\text{Sudut di pusat}}{360^\circ}$

$$\frac{\text{Length of arc}}{\text{Circumference of circle}} = \frac{\text{Angle subtended at centre}}{360^\circ}$$

13 $\frac{\text{Luas sektor}}{\text{Luas bulatan}} = \frac{\text{Sudut di pusat}}{360^\circ}$

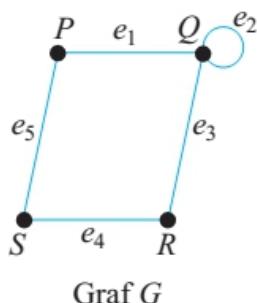
$$\frac{\text{Area of sector}}{\text{Area of circle}} = \frac{\text{Angle subtended at centre}}{360^\circ}$$

14 Faktor skala / Scale factor, $k = \frac{PA'}{PA}$

15 Luas imej = $k^2 \times$ luas objek
Area of image = $k^2 \times$ area of object

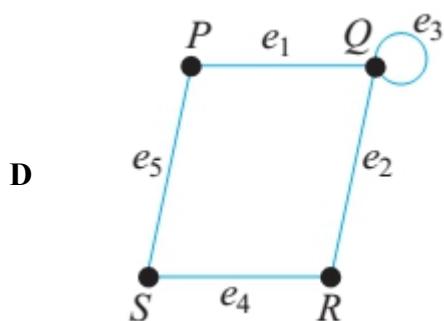
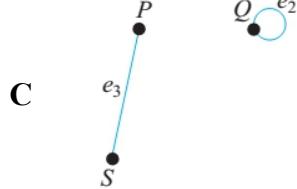
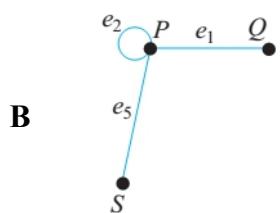
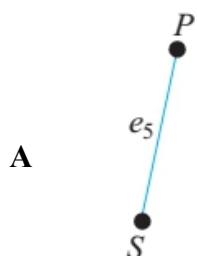
- 1 Bundarkan 50 472 betul kepada tiga angka bererti.
Round off 50472 correct to three significant figures.
- A 50 400
B 50 470
C 50 500
D 55 000
- 2 Nyatakan nilai digit 3 bagi nombor $5\ 347_9$, dalam asas sepuluh
State the value of the digit 3 in the number $5\ 347_9$, in base ten.
- A 27
B 243
C 369
D 2 187
- 3 Seorang jurutaip boleh menaip dalam kadar 90 patah perkataan per minit. Hitung bilangan perkataan yang boleh ditaip bagi jangka masa 5 minit 30 saat. Beri jawapan dalam bentuk piawai.
A typist could type at the rate of 90 sentences per minute. Calculates the number of sentences that can be typed in 5 minutes and 30 seconds. Give the answer in standard form.
- A 4.00×10^2
B 4.30×10^2
C 4.50×10^2
D 4.95×10^2
- 4 Hitung nilai $131_4 - 121_4$ dalam asas sepuluh
Calculate $131_4 - 121_4$ in the base ten
- A 4
B 10
C 40
D 100

- 5** Rajah 1 menunjukkan graf G.
Diagram 1 shows graph G



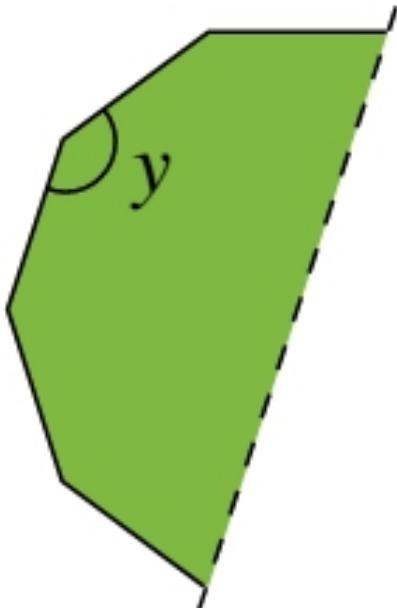
Rajah 1 / Diagram 1

Antara yang berikut yang manakan subgraf bagi graf G.
Which of the following is the subgraph of graph G



- 6 Amir mempunyai sebuah kebun sayur berbentuk poligon sekata, Garis putus-putus dalam Rajah 2 merupakan paksi simetri kebun beliau.

Amir has a vegetables farm in regular polygon shape. The dotted line in the Diagram 2 is a axis of simetry of his farm.



Rajah 2 / Diagram 2

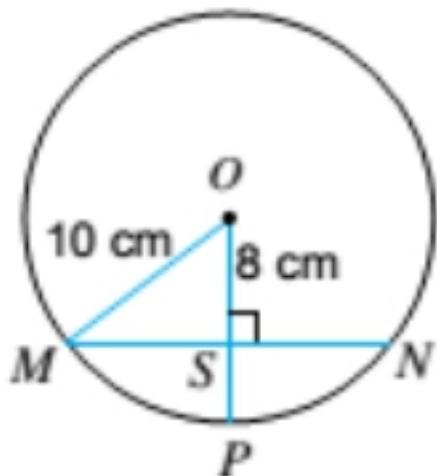
Hitung nilai y

Calculate the value of y

- A 135
- B 144
- C 220
- D 360

- 7 Rajah 3 menunjukkan sebuah bulatan dengan perentas MN yang berserenjang dengan jejari OP.

Diagram 3 shows a circle with chord MN that perpendicular with radius OP.

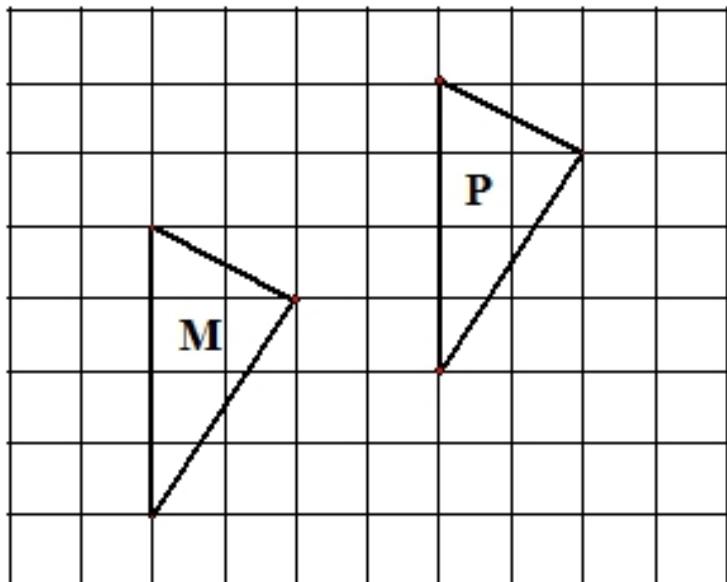


Rajah 3 / Diagram 3

Jika jejari bulatan ialah 10 cm dan $OS = 8\text{ cm}$, hitung panjang perentas MN .
If radius of the circle is 10 cm and $OS = 8\text{ cm}$, calculate the length of chord MN.

- A 6
- B 9
- C 12
- D 15

- 8** Rajah 4 menunjukkan dua segi tiga M dan P dilukis pada grid segiempat sama.
Diagram 4 shows two triangles M and P drawn on the square grid



Rajah 4 / Diagram 4

M ialah imej bagi P di bawah suatu translasi $\begin{pmatrix} x \\ y \end{pmatrix}$.

M is the image of P under a translation $\begin{pmatrix} x \\ y \end{pmatrix}$

Antara yang berikut, yang manakah mewakili $\begin{pmatrix} x \\ y \end{pmatrix}$

Which the following represent $\begin{pmatrix} x \\ y \end{pmatrix}$

A $\begin{pmatrix} 4 \\ 2 \end{pmatrix}$

B $\begin{pmatrix} -4 \\ -2 \end{pmatrix}$

C $\begin{pmatrix} -2 \\ -4 \end{pmatrix}$

D $\begin{pmatrix} 2 \\ 4 \end{pmatrix}$

- 9** Jadual 1 menunjukkan maklumat bagi nilai n , $\sum x$ dan $\sum x^2$.

Table 1 shows information of the value n , $\sum x$ and $\sum x^2$

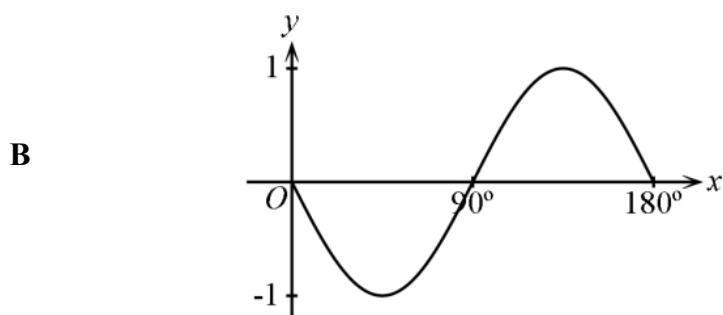
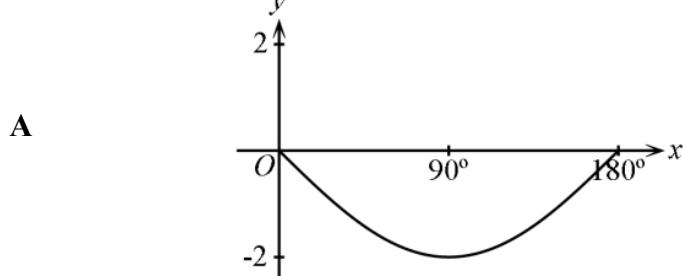
| n | Σx | Σx^2 |
|-----|------------|--------------|
| 12 | 66 | 1452 |

Jadual 1 / Table 1

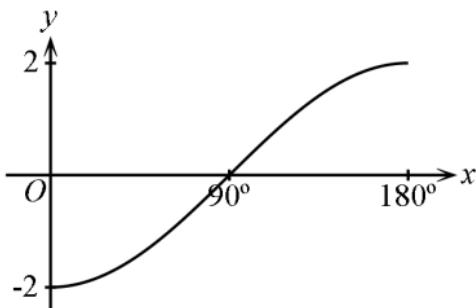
Hitung varians.
Calculate varians

- A** 5.5
- B** 9.53
- C** 90.75
- D** 121

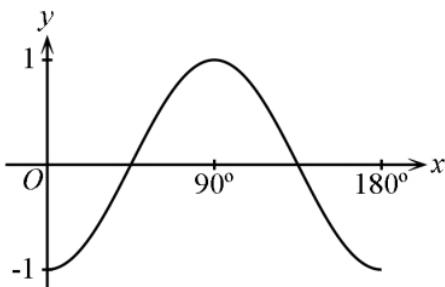
- 10** Antara yang berikut, yang manakah mewakili graf $y = -\cos 2x^\circ$ for $0^\circ \leq x \leq 180^\circ$?
Which of the following represents the graph of $y = -\cos 2x^\circ$ for $0^\circ \leq x \leq 180^\circ$?



C



D



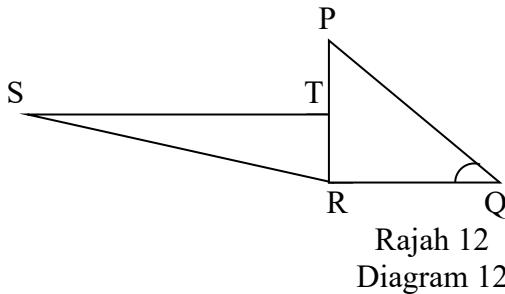
- 11** Antara yang berikut yang manakah urutan yang betul dalam proses pengurusan kewangan?

Which of the following is the correct sequences for the financial management process?

- P : Menilai kedudukan kewangan
Evaluating financial goals
- Q : Menetapkan matlamat kewangan
Setting goals
- R : Mengkaji semula dan menyemak kemajuan
Reviewing and revising the progress
- S : Mewujudkan pelan kewangan
Creating financial plan
- T : Melaksanakan pelan kewangan
Carrying out financing plan

- A** Q, P, S, T, R
- B** Q, S, P, T, R
- C** Q, P, T, S, R
- D** Q, T, S, P, R

- 12** Rajah 12 menunjukkan dua segi tiga bersudut tegak, PQR dan RST. Diberi PT=TR.
Diagram 12 shows two right-angled triangles, PQR and RST. Given PT=TR.



Rajah 12
Diagram 12

Diberi bahawa $\sin \angle PQR = \frac{12}{13}$. Cari panjang ST jika panjang SR : 2RQ

Given that $\sin \angle PQR = \frac{12}{13}$. Find length of ST if length SR: 2RQ

- A** 5
- B** 6
- C** 8
- D** 10

- 13** Ungkapkan $\frac{3pq}{m} \times \frac{mn + mq}{pq^2}$ sebagai satu pecahan tunggal dalam bentuk termudah.

Express $\frac{3pq}{m} \times \frac{mn + mq}{pq^2}$ as a single fraction in its simplest form.

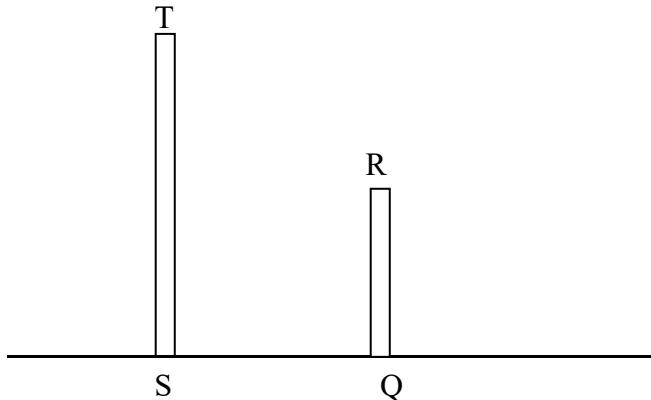
A $\frac{3n + 3q}{pq}$

B $\frac{3n + 3q}{q}$

C $3n + 3q$

D $\frac{3(n + q)}{p}$

- 14 Rajah 14 menunjukkan dua tiang tegak, ST dan QR berdiri pada suatu satah mengufuk. Tinggi tiang ST ialah 30 cm dan jarak antara tiang ST dan QR ialah 15 cm.
Diagram 14 shows two vertical poles, ST and QR, standing on a horizontal plane. Height of pole ST is 30 cm and distance between ST and QR is 15 cm.



Rajah 14
Diagram 14

Sudut dongakan bagi bucu T dari bucu R ialah 45° . Hitung tinggi, dalam m, QR.
The angle of elevation of vertex T from vertex R is 45° . Calculate the height, in m, of QR.

- A 10
B 15
C 30
D 45
- 15 $(x - y)(x + y) + x(x - y) =$
A $2x^2 - y^2 - y$
B $2x^2 - y^2 - xy$
C $2x^2 - y^2 + xy$
D $2x^2 + y^2 - xy$

- 16 Jadual di bawah menunjukkan pendapatan dan perbelanjaan En. Zulkifli.
The table below shows En. Zulkifli's income and expenses.

| | |
|-----------------------------|---------|
| Gaji / Salary | RM4 500 |
| Komisen/commission | RM1 000 |
| Pinjaman rumah/Housing loan | RM1 500 |
| Utility/utilities | RM300 |
| Barangan dapur/Groceries | RM1 200 |

En. Zulkifli menyimpan 10% daripada jumlah pendapatan dan sejumlah RM300 untuk dana kecemasan. Hitung pendapatan lebihan En. Zulkifli
En. Zulkifli kept 10% of total income and a sum of RM300 for the emergency fund. Calculate the surplus of income of En. Zulkifli.

- A RM1 250
B RM1 350
C RM1 500
D RM1 650
- 17 Pendapatan aktif dan pendapatan pasif En. Ramu pada bulan Februari masing-masing ialah RM5 000 dan RM1 800. Perbelanjaan tetap dan perbelanjaan tidak tetapnya dalam bulan yang sama masing-masing RM3 000 dan RM850. Berapakah aliran tunai bulanan En. Ramu.
An active income and a passive income of Mr. Ramu in February are RM5 000 and RM1 800 respectively. His fixed expenses and variable expenses in the same month are RM3 000 and RM850. What is the monthly cash flow of Mr. Ramu.
- A RM2 000
B RM2 500
C RM2 850
D RM2 950

- 18 Chong membeli 100 000 unit saham Q pada harga RM1.10 seunit. Selepas 12 bulan, Chong menjual kesemua saham dengan harga RM1.30 seunit. Kira pulangan pelaburan.

Chong purchased 100 000 units of share Q at RM1.10 per unit. After 12 months , Chong sold all of the share units at RM1.30 per unit. Calculate the return of investment.

- A 18.18%
- B 19.0%
- C 19.19%
- D 20.0%

- 19 Antara aspek berikut, yang manakah harus diambil kira untuk membina pelan kewangan jangka panjang?

Which of the following aspects should be included to create a long-term financial plan?

- A Pendapatan aktif
Active income
- B Pendapatan pasif
Passive income
- C Kadar inflasi
Inflation rate
- D Kenaikan gaji
Salary increment

- 20 Diberi $u = \frac{5v + w}{2}$, ungkapkan v dalam sebutan u dan w

Given $u = \frac{5v + w}{2}$, express v in term of u and w

A $v = \frac{2u - w}{5}$

B $v = \frac{2u + w}{5}$

C $v = \frac{2w + u}{5}$

D $v = \frac{2w - u}{5}$

21 Diberi $4 + \frac{3X}{2} = 7$, cari nilai bagi X.

Given $4 + \frac{3X}{2} = 7$, *find the value of* X.

A $\frac{22}{3}$

B 2

C $\frac{10}{3}$

D 3

22 $\left(\frac{2}{\sqrt{3}}\right)^{-2}$

A $\frac{3}{4}$

B $\frac{4}{3}$

C $\frac{4}{9}$

D $-\frac{9}{4}$

23 Ringkaskan:

Simplify:

$$\left(\frac{2m^4 \times (4n^6)^{\frac{1}{2}}}{(m^6 n^{12})^{\frac{1}{3}}} \right)^2.$$

A $\frac{16m^4}{n^2}$

B $\frac{16}{m^4 n^2}$

C $\frac{8m^4}{n^2}$

D $16m^4 n^2$

24 Selesaikan $\frac{-x+5}{2} < \frac{3}{4}$

Solve $\frac{-x+5}{2} < \frac{3}{4}$

A $x < \frac{14}{4}$

B $x > \frac{14}{4}$

C $x > -\frac{14}{4}$

D $-x < \frac{14}{4}$

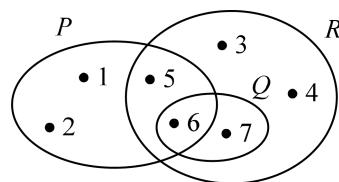
- 25 Rajah 25 menunjukkan skor yang diperolehi oleh peserta-peserta dalam suatu kuiz.
Diagram 25 shows the score obtained by the participants in the quiz

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 124 | 165 | 105 | 132 | 165 | 118 | 126 | 137 |
|-----|-----|-----|-----|-----|-----|-----|-----|

Cari median bagi skor.

Find the median score

- A 126
B 129
C 132
D 137
- 26 Rajah 26 menunjukkan gambar rajah Venn dengan set semesta, $\xi = P \cup Q \cup R$.
Diagram 26 shows Venn Diagram with Universe set $\xi = P \cup Q \cup R$



Senaraikan semua element set $P' \cap (R \cup Q)$.

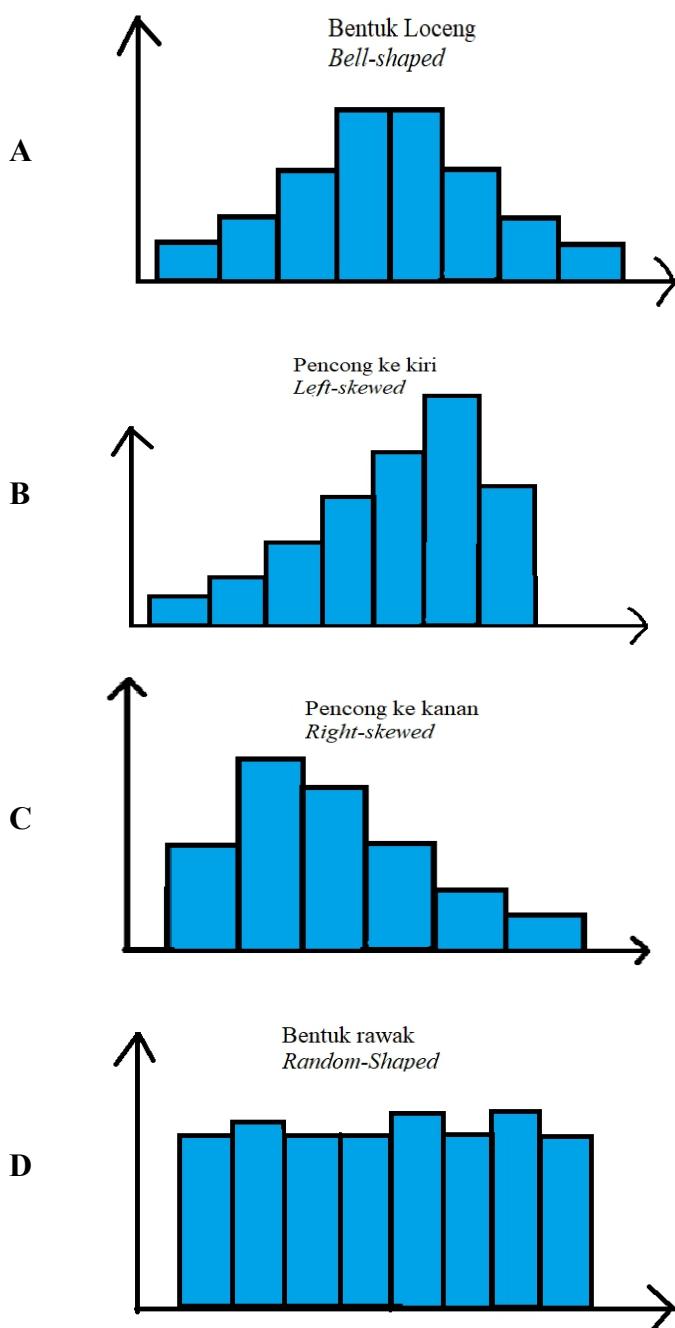
List all the element of set $P' \cap (R \cup Q)$.

- A {3,4}
B {6,7}
C {1,2}
D {3,4,7}

- 27 Farid telah membeli insurans motor untuk motornya dengan peruntukan deduktibel sebanyak RM180. Farid telah mengalami dua peristiwa kemalangan dengan kerugian sebanyak RM130 dalam kemalangan pertama dan RM250 dalam kemalangan kedua. Nyatakan jumlah bayaran pampasan yang boleh dituntutnya bagi setiap kerugian yang dialami.
Farid has purchased motor insurance for his motor with a deductible provision of RM180. Farid suffered two accidents which losses RM130 for the first accidents and RM250 for the second accidents. State the compensation amount that can be claimed for each accident.
- A RM0 dan/*and* RM70
B RM60 dan/*and* RM0
C RM60 dan/*and* RM70
D RM310 dan/*and* RM430
- 28 Puan Aina ingin membeli insurans hayat dengan nilai muka sebanyak RM200 000. Kadar premium tahunan bagi setiap RM1 000 nilai muka yang ditawarkan kepada Puan Aina ialah RM2.04. Berapakah premium bulanan yang perlu dibayar oleh Puan Aina?
Puan Aina wants to buy a life insurance with a face value is RM200 000. The annual premium rate per RM1 000 of face value offered to Puan Aina is RM2.04. What is the monthly premium needs to be paid by Pusn Aina ?
- A RM34.00
B RM40.80
C RM49.02
D RM54.00
- 29 Antara yang berikut, yang manakah **benar** tentang cukai tanah?
Which following is true about quit tax
- A Cukai yang dikenakan kepada pemilik rumah
The tax levied on the owner of house
- B Cukai yang akan dibayar kepada Pejabat Tanah Negeri
The tax will be paid to State Land Office
- C Cukai yang dikenakan dua kali setahun
The tax levied twice a year
- D Cukai yang dikenakan atas pendapatan terperoleh individu
The tax imposed on the income earned by individual

- 30 Anggaran sewa bulanan rumah Azizah ialah RM720 dan kadar cukai pintu ialah 5%. Hitung cukai pintu yang perlu dibayar oleh Azizah untuk setiap 6 bulan .
Estimation of monthly rental of Azizah's house is RM720 and the property assessment tax rate is 5%. Calculate the property assessment tax payable by Azizah for each six months
- A RM216
B RM324
C RM432
D RM504

- 31 Antara histogram yang berikut, yang manakah bentuk taburan yang tidak tepat?
Which of the following histograms is not true about the shape of distribution?



- 32 Jadual di bawah menunjukkan masa dalam minit yang digunakan oleh 35 orang murid untuk menjawab satu soalan Matematik Tambahan.

Table below shows a frequency table which shows the time in minutes spent by 35 students to answer a Additional mathematics questions.

| Masa (minit) <i>Time (minutes)</i> | Kekerapan <i>Frequency</i> |
|---------------------------------------|-------------------------------|
| 3 – 7 | 3 |
| 8 – 12 | 5 |
| 13 – 17 | 9 |
| 18 – 22 | 10 |
| 23 – 27 | 8 |

Hitung min masa dalam minit, digunakan oleh seorang murid.

Calculate the mean time, in minutes spend by a student.

- A 14.3
- B 17.1
- C 18.3
- D 20.2

- 33

| Isi padu (liter) <i>Volume</i> |
|-----------------------------------|
| 4.2 – 4.6 |
| 4.7 – 5.1 |
| 5.2 – 5.6 |

Dalam jadual di atas, selang kelas yang tertinggal ialah

In table above, the missing class interval is

- A 5.7 – 6.1
- B 5.7 – 6.2
- C 5.6 – 6.1
- D 5.6 – 6.2

- 34** Jadual kekerapan di bawah menunjukkan markah yang diperoleh 40 orang murid dalam suatu ujian.

The frequency table below shows the marks obtained by 40 students in a test.

| Markah <i>Marks</i> | Kekerapan <i>Frequency</i> |
|------------------------|-------------------------------|
| 40 - 49 | 3 |
| 50 - 59 | 8 |
| 60 - 69 | 15 |
| 70 - 79 | 9 |
| 80 - 89 | 5 |

Hitung varians

Calculate the variance

- A** 10.997
- B** 65.75
- C** 100.94
- D** 120.94

- 35** Jadual kekerapan di bawah menunjukkan mata yang diperoleh oleh sekumpulan murid dalam suatu Kuiz Matematik.

The frequency table below shows the points obtained by a group of pupils in a Math Quiz.

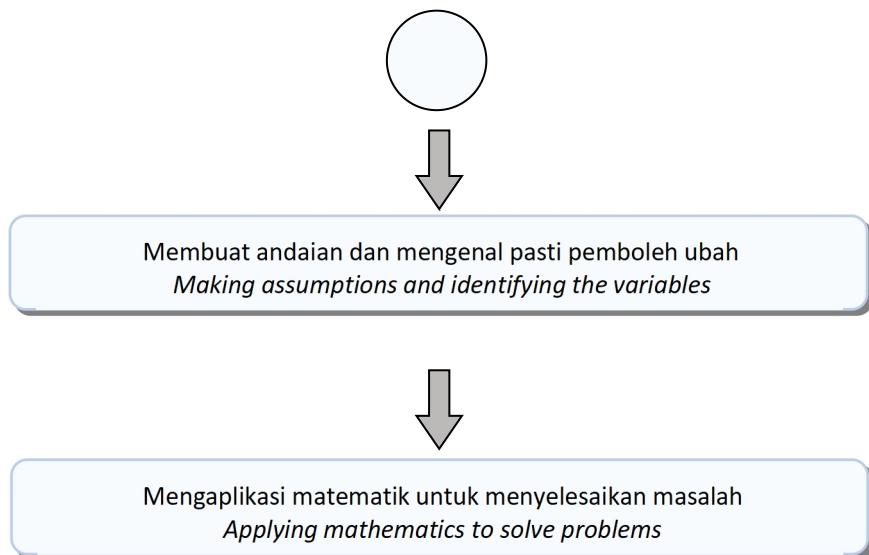
| Mata <i>Point</i> | Kekerapan <i>Frequency</i> | Kekerapan Longgokan <i>Cumulative Frequency</i> |
|----------------------|-------------------------------|--|
| 10 – 14 | 5 | 5 |
| 15 – 19 | X | 11 |
| 20 – 24 | 4 | 15 |
| 25 – 29 | 7 | Y |
| 30 – 34 | 8 | 30 |

Hitung X + Y.

Calculate X+Y.

- A** 18
- B** 24
- C** 28
- D** 30

- 36 Rajah dibawah menunjukkan sebahagian dari proses permodelan matematik.
Diagram below shows part of the mathematical modelling process.



Proses X ialah
Process X is

- A Mengenal pasti dan mendefinisi masalah.
Identifying and defining the problem
- B Memurnikan model matematik.
Refining the mathematical model.
- C Menentusahkan dan mentafsir penyelesaian dalam konteks masalah berkenaan.
Verifying and interpreting solution in the context of the problem.
- D Melaporkan dapatan.
Reporting the findings.

- 37 Harga seketul ayam goreng di kantin sekolah ialah tiga kali ganda harga sebungkus roti. Dengan wang sebanyak RM5, Ziyad membeli sebungkus roti dan seketul ayam. Baki perbelanjaan tersebut ialah RM1. Berapakah wang yang perlu dibayar Ziyad jika dia ingin membeli tiga bungkus roti dan dua ketul ayam?

The price of a piece of fried chicken in the school canteen is three times the price of a packet of bread. For RM5, Ziyad bought a packet of bread and a piece of chicken. The balance of the expenses is RM1. How much money does Ziyad have to pay if she wants to buy three packs of bread and two pieces of chicken?

- A RM8
 - B RM9
 - C RM10
 - D RM12
- 38 Antara komponen berikut, yang manakah dapat dicapai melalui permodelan matematik?
Which of the following components can be achieved through mathematical modeling ?

- I. Memurnikan model matematik
Refining the mathematical modeling.
- II. Mengenal pasti dan mendefinisikan masalah.
Identifying and defining the problem.
- III. Membuat anggaran dan mengenal pasti hipotesis.
Making estimation and identifying hypothesis.
- IV. Melaporkan dapatan
Report the findings.

- A I, II, III
- B I, II, IV
- C I, III, IV
- D II, III, IV

- 39 Kereta Hadi menggunakan 50 liter petrol untuk bergerak sejauh 510 km. Jika Hadi ingin memandu kereta yang sama untuk suatu perjalanan sejauh 754.8 km sehala, berapakah jumlah petrol dalam liter yang diperlukan untuk perjalanan dua hala?
Hadi's car uses 50 liters of petrol to travel 510 km. If Hadi wants to drive the same car for a one-way trip of 754.8 km, how much petrol in liters is needed for a two-way trip?
- A 33.8
B 67.6
C 74
D 148
- 40 Encik Jamil memandu lori dari Telupid pada kelajuan seragam 80 km/j sebelum tiba di Kota Kinabalu. Berapakah masa yang diambil untuk tiba di Kota Kinabalu jika Encik Jamil memandu lori itu dengan kelajuan seragam 60 km/j?
Encik Jamil drives a lorry from Telupid at a constant speed 80 km/h before arriving at Kota Kinabalu. What is the time taken to arrive in Kota Kinabalu if Encik Jamil drives the lorry at a constant speed of 60 km/h?
Antara yang berikut, manakah andaian yang boleh dibuat untuk menyelesaikan masalah di atas?
Which of the following assumptions can be made to solve the above problem?
- I. Kelajuan lori yang dipandu oleh Encik Jamil adalah tetap.
The speed of lorry driven by Encik Jamil is constant.
- II. Encik Jamil memandu dengan teknik yang sama.
Encik Jamil drives with the same technique.
- III. Encik Jamil menggunakan laluan yang sama.
Encik Jamil uses the same route.
- IV. Encik Jamil menggunakan lori yang sama.
Encik Jamil uses the same lorry.
- A I, II
B I, III
C II, III
D II, IV

KERTAS SOALAN TAMAT
END OF QUESTION PAPER