



NAMA:

KELAS:

MODUL PINTAS**PEPERIKSAAN PERCUBAAN TAHUN 2024****MATEMATIK TAMBAHAN TINGKATAN 5****Kertas 1****3472/1**

2 jam

JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIBERITAHU

1. *Kertas peperiksaan ini mengandungi dua bahagian : Bahagian A dan Bahagian B.*

2. *Jawapan hendaklah ditulis pada ruang jawapan yang disediakan di dalam kertas peperiksaan ini.*

3. *Kertas peperiksaan ini adalah dalam dwibahasa.*

4. *Jawapan boleh ditulis dalam bahasa Melayu atau bahasa Inggeris.*

5. *Rajah yang mengiringi soalan tidak dilukis mengikut skala kecuali dinyatakan.*

6. *Kerja mengira mesti ditunjukkan.*

7. *Kertas peperiksaan ini hendaklah diserahkan kepada pengawas peperiksaan pada akhir peperiksaan.*

SOALAN	MARKAH PENUH	MARKAH DIPEROLEH
BAHAGIAN A		
1	3	
2	4	
3	5	
4	4	
5	6	
6	9	
7	6	
8	4	
9	7	
10	3	
11	7	
12	6	
JUMLAH	64	
BAHAGIAN B		
13	8	
14	8	
15	8	
JUMLAH	16	
JUMLAH KESELURUHAN MARKAH		

Kertas peperiksaan ini mengandungi 26 halaman bercetak.

RUMUS FORMULAE

$$1 \quad x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$2 \quad a^m \times a^n = a^{m+n}$$

$$3 \quad a^m \div a^n = a^{m-n}$$

$$4 \quad (a^m)^n = a^{mn}$$

$$5 \quad \log_a mn = \log_a m + \log_a n$$

$$6 \quad \log_a \frac{m}{n} = \log_a m - \log_a n$$

$$7 \quad \log_a m^n = n \log_a m$$

$$8 \quad \log_a b = \frac{\log_c b}{\log_c a}$$

$$9 \quad T_n = a + (n-1)d$$

$$10 \quad S_n = \frac{n}{2} [2a + (n-1)d]$$

$$11 \quad T_n = ar^{n-1}$$

$$12 \quad S_n = \frac{a(r^n - 1)}{r - 1} = \frac{a(1 - r^n)}{1 - r}, r \neq 1$$

$$13 \quad S_\infty = \frac{a}{1 - r}, |r| < 1$$

$$14 \quad y = uv, \frac{dy}{dx} = u \frac{dv}{dx} + v \frac{du}{dx}$$

$$15 \quad y = \frac{u}{v}, \frac{dy}{dx} = \frac{v \frac{du}{dx} - u \frac{dv}{dx}}{v^2}$$

$$16 \quad \frac{dy}{dx} = \frac{dy}{du} \times \frac{du}{dx}$$

17 Luas di bawah lengkung

Area under a curve

$$= \int_b^a y \, dx \text{ atau (or) } \int_b^a x \, dy$$

18 Isipadu janaan

Volume of generation

$$= \int_b^a \pi y^2 \, dx \text{ atau (or) } \int_b^a \pi x^2 \, dy$$

$$19 \quad I = \frac{Q_1}{Q_0} \times 100$$

$$20 \quad I = \frac{\sum W_i I_i}{\sum W_i}$$

$$21 \quad {}^n P_r = \frac{n!}{(n-r)!}$$

$$22 \quad {}^n C_r = \frac{n!}{(n-r)!r!}$$

$$23 \quad P(X=r) = {}^nC_r p^r q^{n-r}, p+q=1$$

$$24 \quad \text{Min/Mean, } \mu=np$$

$$25 \quad \sigma = \sqrt{npq}$$

$$26 \quad Z = \frac{X-\mu}{\sigma}$$

$$27 \quad \text{Panjang lengkok, } s = j\theta \\ \text{Arc length, } s = r\theta$$

$$28 \quad \text{Luas sektor, } L = \frac{1}{2} j^2 \theta \\ \text{Area of sector, } A = \frac{1}{2} r^2 \theta$$

$$29 \quad \sin^2 A + \cos^2 A = 1 \\ \sin^2 A + \cos^2 A = 1$$

$$30 \quad \sec^2 A = 1 + \tan^2 A \\ \sec^2 A = 1 + \tan^2 A$$

$$31 \quad \text{kosek}^2 A = 1 + \cot^2 A \\ \text{cosec}^2 A = 1 + \cot^2 A$$

$$32 \quad \sin 2A = 2 \sin A \cos A \\ \sin 2A = 2 \sin A \cos A$$

$$33 \quad \cos 2A = \cos^2 A - \sin^2 A \\ = 2\cos^2 A - 1 \\ = 1 - 2\sin^2 A \\ \cos 2A = \cos^2 A - \sin^2 A \\ = 2\cos^2 A - 1 \\ = 1 - 2\sin^2 A$$

$$34 \quad \tan 2A = \frac{2 \tan A}{1 - \tan^2 A}$$

$$35 \quad \sin(A \pm B) = \sin A \cos B \pm \cos A \sin B \\ \sin(A \pm B) = \sin A \cos B \pm \cos A \sin B$$

$$36 \quad \cos(A \pm B) = \cos A \cos B \mp \sin A \sin B \\ \cos(A \pm B) = \cos A \cos B \mp \sin A \sin B$$

$$37 \quad \tan(A \pm B) = \frac{\tan A \pm \tan B}{1 \mp \tan A \tan B}$$

$$38 \quad \frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$39 \quad a^2 = b^2 + c^2 - 2bc \cos A \\ a^2 = b^2 + c^2 - 2bc \cos A$$

$$40 \quad \text{Luas segi tiga/ Area of triangle} \\ = \frac{1}{2} ab \sin C$$

$$41 \quad \text{Titik yang membahagi suatu tembereng garis} \\ \text{A point dividing a segment of a line} \\ (x, y) = \left(\frac{nx_1 + mx_2}{m+n}, \frac{ny_1 + my_2}{m+n} \right)$$

$$42 \quad \text{Luas segi tiga / Area of triangle} \\ = \frac{1}{2} |(x_1 y_2 + x_2 y_3 + x_3 y_1) - (x_2 y_1 + x_3 y_2 + x_1 y_3)|$$

$$43 \quad |r| = \sqrt{x^2 + y^2}$$

$$44 \quad \hat{r} = \frac{xi + yj}{\sqrt{x^2 + y^2}}$$

Bahagian A**[64 markah]****Jawab semua soalan.**

- 1 Satu pemboleh ubah rawak diskret $X \sim B(n, p)$ mempunyai min 60 dan sisihan piawai $3\sqrt{5}$. Cari nilai n .

A discrete variable $X \sim B(n, p)$ has a mean of 60 and a standard deviation of $3\sqrt{5}$.

Find the value of n .

[3 markah]

[3 marks]

Jawapan / Answer:

- 2 Titik-titik $(-3, 36)$ dan $(1, 4)$ terletak pada lengkung yang menghubungkan pemboleh ubah x dan y . Satu graf garis lurus diperoleh dengan memplot $\sqrt{y}$ melawan x .
*Points of $(-3, 36)$ and $(1, 4)$ lie on a curve which is related by variables of x and y .
 A straight line graph is obtained by plotting $\sqrt{y}$ against x .*

Cari persamaan lengkung tersebut.

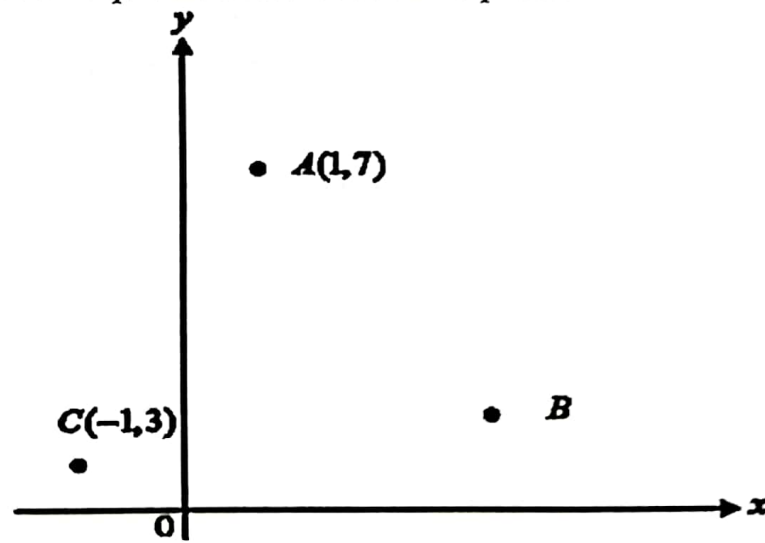
Find the equation of the curve.

[4 markah]

[4 marks]

Jawapan / Answer:

- 3 Rajah 1 menunjukkan tiga titik pada suatu satah Cartes.
 Diagram 1 shows three points lie on a Cartesian plane.



Rajah 1
 Diagram 1

- (a) Nyatakan $\overrightarrow{CA}$.
 State $\overrightarrow{CA}$.

[1 markah]
 [1 mark]

- (b) Diberi bahawa $\overrightarrow{AB} = 3\mathbf{i} + k\mathbf{j}$.
 It is given that $\overrightarrow{AB} = 3\mathbf{i} + k\mathbf{j}$.

- (i) Jika $\overrightarrow{CA} + 3\overrightarrow{AB} = 11\mathbf{i} - 2\mathbf{j}$, cari nilai k dengan menggunakan operasi aritmetik vektor.

If $\overrightarrow{CA} + 3\overrightarrow{AB} = 11\mathbf{i} - 2\mathbf{j}$, find the value of k by using vector's arithmetic operations.

- (ii) Seterusnya, tentukan vektor unit dalam arah $\overrightarrow{AB}$.

Hence, determine the unit vector in the direction of $\overrightarrow{AB}$.

[4 markah]
 [4 marks]

Jawapan / Answer:

4 Suatu fungsi h ditakrifkan oleh $h: x \rightarrow |2x-3|$ untuk domain $-1 \leq x \leq 6$.

A function h is defined by $h: x \rightarrow |2x-3|$ for the domain $-1 \leq x \leq 6$.

(a) Cari nilai-nilai x dengan keadaan $h(x) = 3$.

Find the values of x such that $h(x) = 3$.

[2 markah]

[2 marks]

(b) Cari julat nilai x dengan keadaan $h(x) \leq 4$.

Find the range the of values of x such that $h(x) \leq 4$.

[2 markah]

[2 marks]

Jawapan / Answer:

- 5 (a) Diberi $\frac{d}{dx}[g(x)] = 5f(x)$, cari $\int 40f(x)dx$.

Given that $\frac{d}{dx}[g(x)] = 5f(x)$, find $\int 40f(x)dx$.

[2 markah]

[2 marks]

- (b) Isipadu sebuah silinder, $V \text{ cm}^3$ menokok pada kadar $3 \text{ cm}^3\text{s}^{-1}$. Diberi tinggi silinder, $h \text{ cm}$ adalah dua kali ganda jejari, iaitu $r \text{ cm}$.

The volume of a cylinder, $V \text{ cm}^3$ increases at the rate of $3 \text{ cm}^3\text{s}^{-1}$. Given that height, $h \text{ cm}$ of the cylinder is twice the radius, $r \text{ cm}$.

Hitungkan kadar perubahan aras air pada ketika ketinggiannya adalah 12 cm .

Calculate the rate of change of water level when its height is 12 cm .

[4 markah]

[4 marks]

Jawapan / Answer:

- 6 Diberi hasil tambah sebutan ketiga dan keempat bagi suatu jangjang geometri adalah 640 manakala sebutan kedua adalah kurang 96 dari sebutan ketiga. Semua sebutan dalam jujukan ini adalah nombor bulat.

Given the sum of the third and fourth term of geometric progression is 640 while the second term is 96 less than the third term. All terms in this sequence are whole number.

- (a) Cari sebutan pertama dan nisbah sepunya untuk jangjang tersebut.

Find the first term and the common ratio of the progression.

[4 markah]

[4 marks]

- (b) $\frac{1}{9}, \frac{1}{27}, \frac{1}{81}, \dots$ ialah tiga sebutan pertama bagi suatu jangjang geometri.

$\frac{1}{9}, \frac{1}{27}, \frac{1}{81}, \dots$ are the first three terms of geometric progression.

- (i) Cari nilai n terbesar sekiranya $T_n > \frac{1}{10000}$.

Find the greatest value of n if $T_n > \frac{1}{10000}$.

- (ii) Cari hasil tambah ketak terhinggaan bagi jangjang tersebut.

Find the sum of infinity of the progression.

[5 markah]

[5 marks]

Jawapan / Answer:

Jawapan / Answer:

1. The first part of the question asks for the definition of a function. A function is a relation between a set of inputs (the domain) and a set of possible outputs (the codomain), where each input is related to exactly one output.

2. The second part of the question asks for the domain and range of the function $f(x) = x^2 + 1$. The domain is the set of all real numbers, $\mathbb{R}$, and the range is the set of all real numbers greater than or equal to 1, $[1, \infty)$.

3. The third part of the question asks for the graph of the function $f(x) = x^2 + 1$. The graph is a parabola opening upwards with its vertex at $(0, 1)$.

4. The fourth part of the question asks for the inverse of the function $f(x) = x^2 + 1$. The inverse function is $f^{-1}(x) = \sqrt{x-1}$, defined for $x \geq 1$.

5. The fifth part of the question asks for the composition of the functions $f(x) = x^2 + 1$ and $g(x) = x + 1$. The composition $(f \circ g)(x)$ is $(x+1)^2 + 1 = x^2 + 2x + 2$.

- 7 (a) Terbitkan bahawa $\log_a \frac{x}{y} = \log_a x - \log_a y$.

Derive that $\log_a \frac{x}{y} = \log_a x - \log_a y$.

[3 markah]
[3 marks]

- (b) Seterusnya, cari nilai bagi b jika $\log_b 64 - \log_b 216 = 3$.

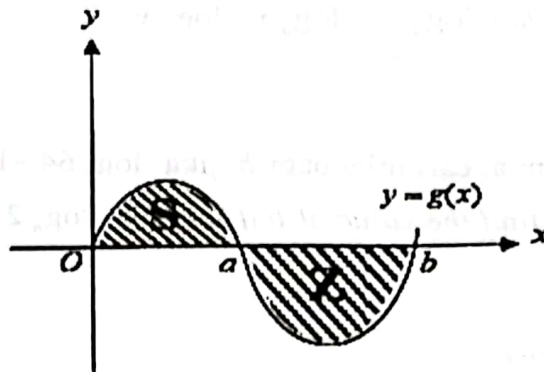
Hence, find the value of b if $\log_b 64 - \log_b 216 = 3$.

[3 markah]
[3 marks]

Jawapan / Answer:

- 8 (a) Rajah 2 menunjukkan lengkung $y = g(x)$.

Diagram 2 shows a curve $y = g(x)$.



Rajah 2
Diagram 2

Diberi luas bagi bahagian berlorek, S dan Z , masing-masing ialah 4 unit² dan 12 unit².

Given the area of the shaded parts, S and Z , are 4 units² and 12 units² respectively.

Nyatakan nilai $\int_0^b g(x)dx$.

State the value of $\int_0^b g(x)dx$.

[1 markah]

[1 mark]

- (b) Diberi fungsi kecerunan suatu lengkung ialah $3x^2 - 8x + 3$.
Cari persamaan lengkung itu yang melalui titik (1,3).

Given the gradient function of a curve is $3x^2 - 8x + 3$.

Find the equation of the curve which passes through point (1,3).

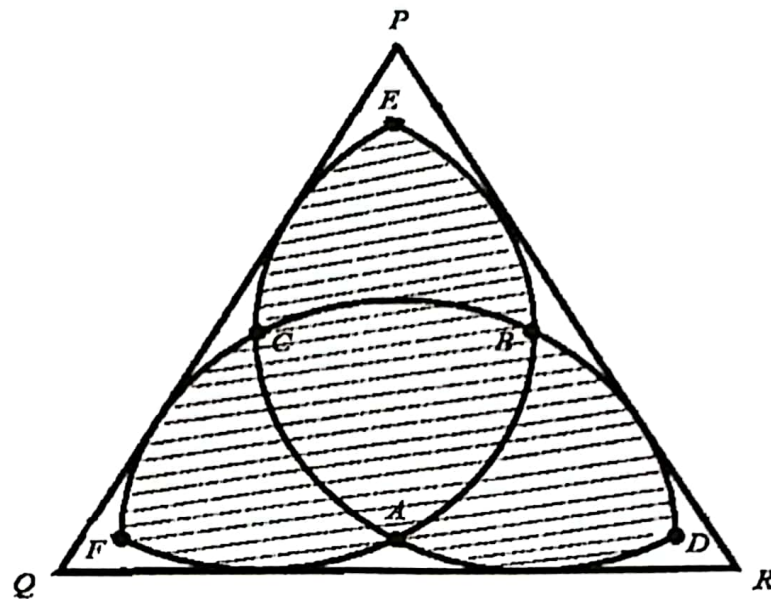
[3 markah]

[3 marks]

Jawapan / Answer:



- 9 Rajah 3 menunjukkan reka bentuk logo sebuah syarikat.
Diagram 3 shows the design of the logo of a company.



Rajah 3
 Diagram 3

Logo terdiri daripada tiga lengkok kongruen, $FCBD$, $DACE$ dan $EBAF$ yang dilukis di dalam segi tiga PQR . Lengkok-lengkok $FCBD$, $DACE$, dan $EBAF$ masing-masing berpusat di A , B , dan C . Setiap lengkok tersebut mempunyai jejari 5 cm.

The logo consists of three congruent arcs of $FCBD$, $DACE$ and $EBAF$ which are drawn inside a triangle PQR . The arc of $FCBD$, $DACE$ and $EBAF$ centred at A , B and C respectively. Each arc has a radius of 5 cm.

[Guna / Use $\pi = 3.142$]

Hitung

Calculate

- (a) perimeter, dalam cm, kawasan berlorek,
the perimeter, in cm, of the shaded region,

[3 markah]

[3 marks]

- (b) luas, dalam cm^2 , kawasan berlorek.
the area, in cm^2 , of the shaded region.

[4 markah]

[4 marks]

Jawapan / Answer:

Jawapan / Answer:

- 10** Dalam suatu permainan menembak di sebuah taman hiburan, kebarangkalian untuk menang ialah 12.5%. Subra telah membeli tiket untuk bermain permainan itu sebanyak n kali. Kebarangkalian bagi Subra menang sekali dalam permainan itu adalah 15 kali kebarangkalian kalah dalam semua permainan.

In a shooting game in an amusement park, the probability of winning is 12.5%. Subra bought tickets to play n games. The probability for Subra to win once is 15 times the probability of losing all the games.

- (a) Cari nilai n .

Find the value of n .

[2 markah]

[2 marks]

- (b) Nyatakan varians.

State the variance.

[1 markah]

[1 mark]

Jawapan / Answer:

- 11 (a) Rajah 4 menunjukkan empat keping kad huruf.
Diagram 4 shows four letter cards.



Rajah 4
Diagram 4

- (i) Cari bilangan cara berlainan untuk menyusun semua kad dalam satu baris.
Find the number of different ways to arrange all the cards in a row.
- (ii) Seterusnya, kad-kad huruf berlabel I, F dan L ditambah masuk bagi membentuk perkataan INFLASI. Cari bilangan cara berlainan untuk menyusun semua kad dalam satu baris jika huruf konsonan sentiasa bersama.
Hence, the letter cards labelled I, F and L are added to form the word INFLASI. Find the number of different ways to arrange all the cards in a row if the consonants are always together.
- [3 markah]
[3 marks]
- (b) Terdapat 10 orang murid lelaki dan 15 orang murid perempuan di dalam sebuah kelas.
There are 10 boys and 15 girls in a class.
- (i) Cari bilangan cara berbeza jika seorang guru ingin memilih 8 orang murid dari kelas itu untuk menyertai satu pertandingan dengan keadaan bilangan murid lelaki dan murid perempuan adalah sama.
Find the number of different ways if a teacher wants to select 8 pupils from the class to participate in a competition such that the number of boys and girls is equal.
- (ii) Semua murid yang terpilih ini akan menjalani satu sesi penggambaran. Cari bilangan cara berbeza supaya murid lelaki tidak berada bersebelahan.
All of the selected pupils will undergo a photo session. Find the number of different ways such that the boys cannot be next to each other.
- [4 markah]
[4 marks]

Jawapan / Answer:

Jawapan / Answer:

$$\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} = \frac{1}{8}$$

$$\frac{1}{8} \times \frac{1}{8} = \frac{1}{64}$$

[Mark: 2]

[Mark: 2]

1. A rectangular box is shown below. The length of the box is 10 cm, the width is 5 cm, and the height is 3 cm.

2. A rectangular box is shown below. The length of the box is 10 cm, the width is 5 cm, and the height is 3 cm.

3. A rectangular box is shown below. The length of the box is 10 cm, the width is 5 cm, and the height is 3 cm.

4. A rectangular box is shown below. The length of the box is 10 cm, the width is 5 cm, and the height is 3 cm.

5. A rectangular box is shown below. The length of the box is 10 cm, the width is 5 cm, and the height is 3 cm.

6. A rectangular box is shown below. The length of the box is 10 cm, the width is 5 cm, and the height is 3 cm.



Diagram 2
[Mark: 2]

[Mark: 2]

[Mark: 2]

Diagram 2

12 (a) Permudahkan $\frac{8.1x^3y^4}{0.9x^8y^{-3}}$.

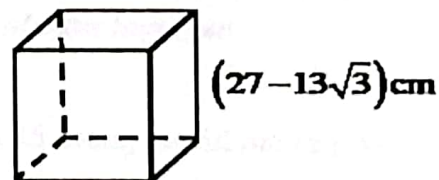
Simplify $\frac{8.1x^3y^4}{0.9x^8y^{-3}}$.

[2 markah]

[2 marks]

- (b) Rajah 5 menunjukkan sebuah kuboid yang mempunyai isipadu $30 + 2\sqrt{3} \text{ cm}^3$. Diberi tinggi kuboid ialah $27 - 13\sqrt{3} \text{ cm}$. Cari luas tapak kuboid, A dalam bentuk $a + b\sqrt{c}$, dengan keadaan a , b dan c ialah integer.

Diagram 5 shows a cuboid with a volume $30 + 2\sqrt{3} \text{ cm}^3$. Given the height of cuboid is $(27 - 13\sqrt{3}) \text{ cm}$. Find the area of cuboid base, A in the form $a + b\sqrt{c}$, where a , b and c are integers.



Rajah 5
Diagram 5

[4 markah]

[4 marks]

Jawapan / Answer:

Jawapan / Answer:

Diagram 1
 Diagram 2

Diagram 1 menunjukkan bahawa sistem tenaga elektrik adalah satu sistem yang kompleks yang melibatkan banyak komponen yang berinteraksi antara satu sama lain. Diagram 2 menunjukkan bahawa sistem tenaga elektrik adalah satu sistem yang kompleks yang melibatkan banyak komponen yang berinteraksi antara satu sama lain.

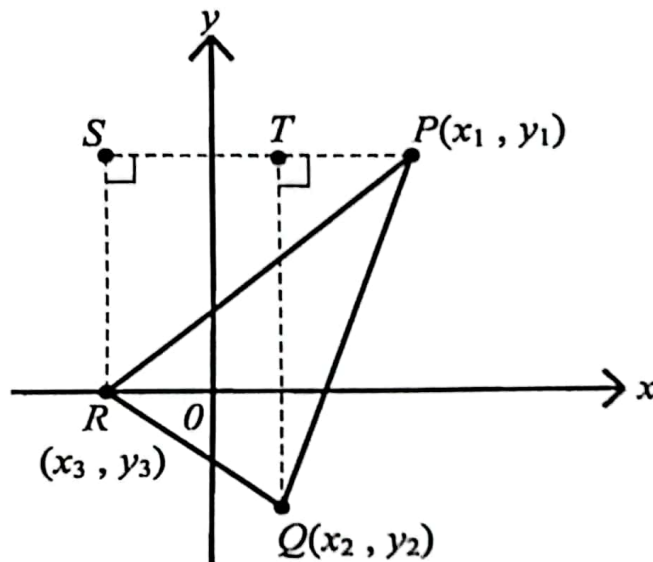
Diagram 1
 Diagram 2

Bahagian B**[16 markah]**

Bahagian ini mengandungi tiga soalan. Jawab dua soalan.

- 13 Rajah 6 menunjukkan sebuah segi tiga PQR , dengan kedudukan $P(x_1, y_1)$, $Q(x_2, y_2)$ dan $R(x_3, y_3)$ disusun mengikut tertib.

Diagram 6 shows a triangle PQR , with the position of $P(x_1, y_1)$, $Q(x_2, y_2)$ and $R(x_3, y_3)$ arranged in order.



Rajah 6
Diagram 6

- (a) Terbitkan rumus luas segi tiga.
Derive the formula of area of triangle.

[2 markah]
[2 marks]

- (b) (i) Diberi bucu-bucu P dan Q masing-masing ialah $(3, 4)$ dan $(1, -2)$.
Bucu R terletak pada paksi- x .
Cari koordinat R sekiranya luas ΔPQR ialah 10 unit^2 .
*Given vertices P and Q are $(3, 4)$ and $(1, -2)$ respectively. Vertex R lies on the x -axis..
Find the coordinates of R if the area of ΔPQR is 10 units^2 .*
- (ii) Titik M bergerak supaya jaraknya dari titik R ialah dua kali jaraknya dari titik P . Cari persamaan lokus bagi M .
Point M moves such that its distance from point R is twice its distance from point P . Find the equation of locus of M .

[6 markah]
[6 marks]

Jawapan / Answer:

- 14 (a) Diberi bahawa $\cot \theta = k$ dengan keadaan θ ialah sudut tirus, ungkapkan $\cos 2\theta$ dalam sebutan k .
Given that $\cot \theta = k$ such that θ is an acute angle, express $\cos 2\theta$ in terms of k . [2 markah]
 [2 marks]
- (b) Diberi $\sin \theta = -t$ untuk $90^\circ < \theta < 270^\circ$, ungkapkan $\sin 2\theta$ dalam sebutan t .
Given $\sin \theta = -t$ for $90^\circ < \theta < 270^\circ$, express $\sin 2\theta$ in terms of t . [2 markah]
 [2 marks]
- (c) Dengan menggunakan rumus sudut berganda, cari nilai $\tan 67.5^\circ$. Beri jawapan betul kepada tiga tempat perpuluhan.
By using double-angled formula, find the value of $\tan 67.5^\circ$. Give the answer correct to three decimal places. [4 markah]
 [4 marks]

Jawapan / Answer:

- 15 (a) Fungsi kuadratik $h(x) = -x^2 + 7x - 10$ boleh diungkapkan dalam bentuk

$$h(x) = -\left(x - \frac{7}{2}\right)^2 + m \text{ dengan keadaan } m \text{ ialah pemalar.}$$

The quadratic function $h(x) = -x^2 + 7x - 10$ can be expressed in the form of

$$h(x) = -\left(x - \frac{7}{2}\right)^2 + m \text{ where } m \text{ is a constant.}$$

- (i) Cari nilai m .

Find the value of m .

- (ii) Lakar graf $h(x)$ bagi domain $0 \leq x \leq 6$. Seterusnya, nyatakan julat yang sepadan bagi graf $h(x)$.

Sketch the graph $h(x)$ for domain $0 \leq x \leq 6$. Hence, state the corresponding range for graph of $h(x)$.

[6 markah]

[6 marks]

- (b) Diberi $f(x) = x^2 - 7x + 13$, cari julat nilai x bagi $f(x) \leq 3$ dengan menggunakan kaedah jadual.

Given that $f(x) = x^2 - 7x + 13$, find the range of values of x for $f(x) \leq 3$ by using table method.

[2 markah]

[2 marks]

Jawapan / Answer:

Jawapan / Answer:

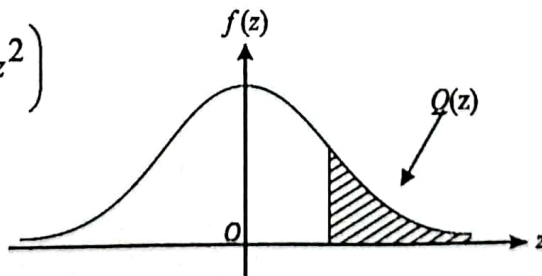
KERTAS PEPERIKSAAN TAMAT

THE UPPER TAIL PROBABILITY $Q(z)$ FOR THE NORMAL DISTRIBUTION $N(0,1)$
KEBARANGKALIAN HUJUNG ATAS $Q(z)$ BAGI TABURAN NORMAL $N(0, 1)$

z	0	1	2	3	4	5	6	7	8	9	Minus / Tolak								
0.0	0.5000	0.4960	0.4920	0.4880	0.4840	0.4801	0.4761	0.4721	0.4681	0.4641	4	8	12	16	20	24	28	32	36
0.1	0.4602	0.4562	0.4522	0.4483	0.4443	0.4404	0.4364	0.4325	0.4286	0.4247	4	8	12	16	20	24	28	32	36
0.2	0.4207	0.4168	0.4129	0.4090	0.4052	0.4013	0.3974	0.3936	0.3897	0.3859	4	8	12	15	19	23	27	31	35
0.3	0.3821	0.3783	0.3745	0.3707	0.3669	0.3632	0.3594	0.3557	0.3520	0.3483	4	7	11	15	19	22	26	30	34
0.4	0.3446	0.3409	0.3372	0.3336	0.3300	0.3264	0.3228	0.3192	0.3156	0.3121	4	7	11	15	18	22	25	29	32
0.5	0.3085	0.3050	0.3015	0.2981	0.2946	0.2912	0.2877	0.2843	0.2810	0.2776	3	7	10	14	17	20	24	27	31
0.6	0.2743	0.2709	0.2676	0.2643	0.2611	0.2578	0.2546	0.2514	0.2483	0.2451	3	7	10	13	16	19	23	26	29
0.7	0.2420	0.2389	0.2358	0.2327	0.2296	0.2266	0.2236	0.2206	0.2177	0.2148	3	6	9	12	15	18	21	24	27
0.8	0.2119	0.2090	0.2061	0.2033	0.2005	0.1977	0.1949	0.1922	0.1894	0.1867	3	5	8	11	14	16	19	22	25
0.9	0.1841	0.1814	0.1788	0.1762	0.1736	0.1711	0.1685	0.1660	0.1635	0.1611	3	5	8	10	13	15	18	20	23
1.0	0.1587	0.1562	0.1539	0.1515	0.1492	0.1469	0.1446	0.1423	0.1401	0.1379	2	5	7	9	12	14	16	19	21
1.1	0.1357	0.1335	0.1314	0.1292	0.1271	0.1251	0.1230	0.1210	0.1190	0.1170	2	4	6	8	10	12	14	16	18
1.2	0.1151	0.1131	0.1112	0.1093	0.1075	0.1056	0.1038	0.1020	0.1003	0.0985	2	4	6	7	9	11	13	15	17
1.3	0.0968	0.0951	0.0934	0.0918	0.0901	0.0885	0.0869	0.0853	0.0838	0.0823	2	3	5	6	8	10	11	13	14
1.4	0.0808	0.0793	0.0778	0.0764	0.0749	0.0735	0.0721	0.0708	0.0694	0.0681	1	3	4	6	7	8	10	11	13
1.5	0.0668	0.0655	0.0643	0.0630	0.0618	0.0606	0.0594	0.0582	0.0571	0.0559	1	2	4	5	6	7	8	10	11
1.6	0.0548	0.0537	0.0526	0.0516	0.0505	0.0495	0.0485	0.0475	0.0465	0.0455	1	2	3	4	5	6	7	8	9
1.7	0.0446	0.0436	0.0427	0.0418	0.0409	0.0401	0.0392	0.0384	0.0375	0.0367	1	2	3	4	4	5	6	7	8
1.8	0.0359	0.0351	0.0344	0.0336	0.0329	0.0322	0.0314	0.0307	0.0301	0.0294	1	1	2	3	4	4	5	6	6
1.9	0.0287	0.0281	0.0274	0.0268	0.0262	0.0256	0.0250	0.0244	0.0239	0.0233	1	1	2	2	3	4	4	5	5
2.0	0.0228	0.0222	0.0217	0.0212	0.0207	0.0202	0.0197	0.0192	0.0188	0.0183	0	1	1	2	2	3	3	4	4
2.1	0.0179	0.0174	0.0170	0.0166	0.0162	0.0158	0.0154	0.0150	0.0146	0.0143	0	1	1	2	2	2	3	3	4
2.2	0.0139	0.0136	0.0132	0.0129	0.0125	0.0122	0.0119	0.0116	0.0113	0.0110	0	1	1	1	2	2	2	3	3
2.3	0.0107	0.0104	0.0102								0	1	1	1	1	2	2	2	2
				0.00990	0.00964	0.00939	0.00914				3	5	8	10	13	15	18	20	23
								0.00889	0.00866	0.00842	2	5	7	9	12	14	16	16	21
2.4	0.00820	0.00798	0.00776	0.00755	0.00734						2	4	6	8	11	13	15	17	19
						0.00714	0.00695	0.00676	0.00657	0.00639	2	4	6	7	9	11	13	15	17
2.5	0.00621	0.00604	0.00587	0.00570	0.00554	0.00539	0.00523	0.00508	0.00494	0.00480	2	3	5	6	8	9	11	12	14
2.6	0.00466	0.00453	0.00440	0.00427	0.00415	0.00402	0.00391	0.00379	0.00368	0.00357	1	2	3	5	6	7	9	9	10
2.7	0.00347	0.00336	0.00326	0.00317	0.00307	0.00298	0.00289	0.00280	0.00272	0.00264	1	2	3	4	5	6	7	8	9
2.8	0.00256	0.00248	0.00240	0.00233	0.00226	0.00219	0.00212	0.00205	0.00199	0.00193	1	1	2	3	4	4	5	6	6
2.9	0.00187	0.00181	0.00175	0.00169	0.00164	0.00159	0.00154	0.00149	0.00144	0.00139	0	1	1	2	2	3	3	4	4
3.0	0.00135	0.00131	0.00126	0.00122	0.00118	0.00114	0.00111	0.00107	0.00104	0.00100	0	1	1	2	2	2	3	3	4

$$f(z) = \frac{1}{\sqrt{2\pi}} \exp\left(-\frac{1}{2}z^2\right)$$

$$Q(z) = \int_z^{\infty} f(z) dz$$



Example / Contoh:

If $X \sim N(0, 1)$, then $P(X > k) = Q(k)$

Jika $X \sim N(0, 1)$, maka $P(X > k) = Q(k)$