

ULANGKAJI TINGKATAN 5**BAB 2 : MATRIKS****(12 soalan: Isi dalam bulatan)****NAMA GURU:****SUBJEK: MATEMATIK****NAMA PELAJAR:****KELAS:****SOALAN 1**

Sebuah muzium arkeologi telah dikunjungi oleh 957 orang remaja, 2 450 orang dewasa dan 156 orang warga emas. Antara yang berikut, yang manakah mewakili maklumat di atas?

An archeology museum is attended by 957 teenagers, 2 450 adults and 156 senior citizens. Which of the following represents the above information?

A $\begin{pmatrix} 957 & 157 & 2450 \end{pmatrix}$

B $\begin{pmatrix} 957 & 2450 & 156 \end{pmatrix}$

C $\begin{pmatrix} 156 \\ 2450 \\ 957 \end{pmatrix}$

D $\begin{pmatrix} 957 \\ 156 \\ 2450 \end{pmatrix}$

SOALAN 2

Dalam Peperiksaan Akhir Tahun, Ruzaini telah mendapat 85 markah untuk Matematik, 60 markah untuk Sains dan 68 markah untuk Kimia. Tinesh pula telah mendapat 75 markah untuk Matematik, 64 markah untuk Sains dan 62 markah untuk Kimia. Antara maklumat berikut, yang manakah diwakili dengan betul dalam bentuk matriks?

In the Final Year Examination, Ruzaini scores 85 marks for Mathematics, 60 marks for Science and 68 marks for Chemistry. Tinesh scores 75 marks for Mathematics, 64 marks for Science and 62 marks for Chemistry. Which of the following information is represented in the form of matrices correctly?

A $\begin{pmatrix} 62 & 64 & 75 \\ 85 & 60 & 68 \end{pmatrix}$

C $\begin{pmatrix} 85 & 60 & 68 \\ 62 & 64 & 75 \end{pmatrix}$

B $\begin{pmatrix} 68 & 75 \\ 60 & 64 \\ 85 & 62 \end{pmatrix}$

D $\begin{pmatrix} 85 & 75 \\ 60 & 64 \\ 68 & 62 \end{pmatrix}$

SOALAN 3

Diberi matriks $P = \begin{pmatrix} 8 & -3 & 12 \\ -19 & 25 & 6 \end{pmatrix}$.

Antara yang berikut, yang manakah peringkat yang betul bagi matriks P?

It is given that matrix $P = \begin{pmatrix} 8 & -3 & 12 \\ -19 & 25 & 6 \end{pmatrix}$.

Which of following is the correct order of matrix P?

A 2×2

C 3×2

B 2×3

D 3×3

SOALAN 4

Diberi matriks $Q = \begin{bmatrix} -4 & 5 & 13 \\ 6 & 8 & -6 \\ 9 & -17 & 2 \end{bmatrix}$. Apakah unsur yang berada di baris 3 dan lajur 2?

It is given that matrix $Q = \begin{bmatrix} -4 & 5 & 13 \\ 6 & 8 & -6 \\ 9 & -17 & 2 \end{bmatrix}$. What is the element in row 3 and column 2?

- A** 8 **C** -6
B 2 **D** -17

SOALAN 5

Diberi matriks $\begin{pmatrix} 12 & -4 \\ 5 & 27 \\ -8 & 32 \end{pmatrix}$

Antara yang berikut, yang manakah unsur r_{21} ?

It is given that matrix $\begin{pmatrix} 12 & -4 \\ 5 & 27 \\ -8 & 32 \end{pmatrix}$. Which of the following is the element r_{21} ?

- A** - 8 **C** 5
B -4 **D** 27

SOALAN 6

Diberi matriks $S = \begin{pmatrix} -34 & -26 \\ 18 & 45 \end{pmatrix}$.

Hitung nilai $s_{11} + s_{22}$.

It is given that matrix $S = \begin{pmatrix} -34 & -26 \\ 18 & 45 \end{pmatrix}$.

Calculate the value of $s_{11} + s_{22}$

- A** - 60 **C** 11
B - 8 **D** 63

SOALAN 7

Diberi bahawa matriks $P = \begin{pmatrix} 2h+1 \\ 5h-8k \end{pmatrix}$ matriks

$Q = \begin{pmatrix} 15 \\ 31 \end{pmatrix}$. Apakah nilai h dan k jika $P = Q$?

It is given that matrix $P = \begin{pmatrix} 2h+1 \\ 5h-8k \end{pmatrix}$ and matrix

$Q = \begin{pmatrix} 15 \\ 31 \end{pmatrix}$. What is the value of h and of k if $P = Q$?

- A** $h = 7, k = \frac{1}{2}$ **C** $h = 8, k = \frac{9}{8}$
B $h = 7, k = \frac{1}{4}$ **D** $h = 8, k = \frac{3}{8}$

SOALAN 8

$$\begin{bmatrix} -11 & 9 \\ 10 & 4 \end{bmatrix} + \begin{bmatrix} 11 & 8 \\ -7 & -5 \end{bmatrix} =$$

A $\begin{bmatrix} 0 & 16 \\ 3 & 9 \end{bmatrix}$ **C** $\begin{bmatrix} 0 & 17 \\ 3 & -1 \end{bmatrix}$

B $\begin{bmatrix} 0 & 17 \\ 17 & 9 \end{bmatrix}$ **D** $\begin{bmatrix} 22 & 17 \\ 3 & -1 \end{bmatrix}$

SOALAN 9

$$\begin{pmatrix} 7 & 9 \\ -4 & 5 \end{pmatrix} - \begin{pmatrix} -9 & 2 \\ 6 & -8 \end{pmatrix} =$$

A $\begin{pmatrix} -2 & 7 \\ 10 & 3 \end{pmatrix}$ **C** $\begin{pmatrix} 16 & 7 \\ 10 & -3 \end{pmatrix}$

B $\begin{pmatrix} -2 & 11 \\ 10 & -3 \end{pmatrix}$ **D** $\begin{pmatrix} 16 & 7 \\ -10 & 13 \end{pmatrix}$

SOALAN 10

Diberi bahawa $\begin{pmatrix} 12 & -6 \\ 11 & x \end{pmatrix} - \begin{pmatrix} 4 & -10 \\ 5 & -7 \end{pmatrix} = 2 \begin{pmatrix} 4 & y \\ 3 & 2 \end{pmatrix}$.

Hitung nilai x dan y .

Given that $\begin{pmatrix} 12 & -6 \\ 11 & x \end{pmatrix} - \begin{pmatrix} 4 & -10 \\ 5 & -7 \end{pmatrix} = 2 \begin{pmatrix} 4 & y \\ 3 & 2 \end{pmatrix}$.

Find the value of x and y .

A $x = -3, y = -2$ **C** $x = 3, y = -2$

B $x = -3, y = 2$ **D** $x = 3, y = 2$

SOALAN 11

Diberi bahawa $7M - \begin{pmatrix} 7 & -10 \\ -3 & 3 \end{pmatrix} = 2 \begin{pmatrix} 3 & -9 \\ 7 & -2 \end{pmatrix}$.

Cari matriks M .

Given that $7M - \begin{pmatrix} 7 & -10 \\ -3 & 3 \end{pmatrix} = 2 \begin{pmatrix} 3 & -9 \\ 7 & -2 \end{pmatrix}$.

Find matrix M .

A $\begin{pmatrix} -\frac{3}{7} & -\frac{8}{7} \\ \frac{17}{7} & -\frac{2}{7} \end{pmatrix}$

C $\begin{pmatrix} \frac{13}{7} & -4 \\ \frac{11}{7} & -\frac{1}{7} \end{pmatrix}$

B $\begin{pmatrix} -\frac{3}{7} & -4 \\ \frac{17}{7} & -\frac{1}{7} \end{pmatrix}$

D $\begin{pmatrix} -2 & -4 \\ \frac{11}{7} & -\frac{8}{7} \end{pmatrix}$

SOALAN 12

$$\begin{pmatrix} -2 & 4 \end{pmatrix} \begin{pmatrix} 6 & -1 \\ -5 & 3 \end{pmatrix} =$$

A $\begin{pmatrix} -32 & 14 \end{pmatrix}$ **C** $\begin{pmatrix} -32 \\ 14 \end{pmatrix}$

B $\begin{pmatrix} -8 & 10 \end{pmatrix}$ **D** $\begin{pmatrix} -8 \\ 10 \end{pmatrix}$

