AJI SYAHPUTRA [11-TPM-1]

Started on Wednesday, 6 April 2022, 08:07

State In progress

Question 1

Answer saved

Marked out of 1

Edit question

Diketahui vektor $\vec{u} = 3\hat{i} + 2\hat{j} - \hat{k}, \vec{v} = 3\hat{i} + 9\hat{j} - 12\hat{k}$ Jika vektor $2\vec{u} - a\vec{v}$ tegak lurus $\vec{v}$, maka nilai a =...

Select one:

- -1
- 3
- 1
- $-\frac{1}{3}$
- $\frac{1}{3}$

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	
2	**6/04/22, 08:08**	**Saved: 1**	**Answer saved**	

Question 2

Answer saved

Marked out of 1

Edit question

Diketahui vektor $\vec{a} = \hat{i} + 2\hat{j} - 3\hat{k}, \vec{b} = 3\hat{i} + 5\hat{k}, \vec{c} = -2\hat{i} - 4\hat{j} + \hat{k}$ dan $\vec{u} = 2\vec{a} + \vec{b} - \vec{c}$. Vektor $\vec{u}$ adalah .....

Select one:

- $2\hat{i} - 2\hat{j}$
- $7\hat{i} - 8\hat{j} - 2\hat{k}$
- $7\hat{i} + 8\hat{j} - 2\hat{k}$
- $5\hat{i} + 6\hat{j} + \hat{k}$
- $3\hat{i} - 2\hat{j} - 2\hat{k}$

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Step	Waktu	Action	State	Marks
2	**6/04/22, 08:08**	**Saved: \ (7\hat{i}+8\hat{j}-2\hat{k}\)**	**Answer saved**	

Question 3

Answer saved

Marked out of 1

Edit question

Diketahui A(1,2,3), B(3,3,1), dan C(7,5,−3), Jika A,B, dan C segaris (kolinear), maka $\overrightarrow{AB} : \overrightarrow{BC}$ adalah ….

Select one:

- 2:5
- 7:5
- 5:7
- 1:2
- 2:1

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	
2	**6/04/22, 08:08**	**Saved: 7:5**	**Answer saved**	

Question 4

Answer saved

Marked out of 1

Edit question

Diketahui vektor-vektor $\vec{a} = (1,3,3), \vec{b} = (3,2,1)$ dan $\vec{c} = (1,-5,0)$. Sudut antara vektor $(\vec{a} - \vec{b})$ dan $(\vec{a} + \vec{c})$ adalah....

Select one:

- 90
- 100
- 45
- 60
- 30

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	
2	**6/04/22, 08:08**	**Saved: 100**	**Answer saved**	

Question 5

Answer saved

Marked out of 1

Edit question

Suatu fungsi kuadrat mempunyai nilai minimum –2 untuk x = 3 dan untuk x = 0 nilai fungsi 16. Fungsi kuadrat itu adalah ...

Select one:

- $f(x) = x^2 + 6x + 8$
- $f(x) = x^2 - 6x + 8$
- $f(x) = 2x^2 + 12x + 16$
- $f(x) = 2x^2 - 12x + 16$
- $f(x) = 2x^2 - 12x - 16$

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	
2	**6/04/22, 08:08**	**Saved: \(f\left (x \right)=2x^{2}-12x-16\)**	**Answer saved**	

Question 6

Answer saved

Marked out of 1

Edit question

Diketahui vektor $\vec{a} = (2, -3, 1)$ dan $\vec{b} = (1, -2, 3)$. Nilai sinus sudut antar vektor $\vec{a}$ dan $\vec{b}$ adalah …

Select one:

- $\frac{5\sqrt{3}}{11}$
- $\frac{5\sqrt{3}}{14}$
- $\frac{5}{7}$
- $\frac{11}{14}$
- $\frac{2\sqrt{6}}{7}$

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	
2	**6/04/22, 08:08**	**Saved: \(\frac{5\sqrt{3}}{14}\)**	**Answer saved**	

Question 7

Answer saved

Marked out of 1

Edit question

Diketahui $\vec{a}, \vec{b}$, dan $\vec{c}$ adalah vektor satuan yang membentuk sudut 60° satu sama lain. Nilai $(\vec{a}+\vec{b}) \bullet (\vec{b}-\vec{c}) = \ldots$

Select one:

- 2
- $\frac{1}{2}$
- $\frac{1}{4}$
- $\frac{1}{8}$
- 1

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	
2	**6/04/22, 08:08**	**Saved: \(\frac{1}{8}\)**	**Answer saved**	

Question 8

Answer saved

Marked out of 1

Edit question

Diketahui bahwa $\vec{a} = \begin{pmatrix} 1 \\ 2 \\ -3 \end{pmatrix}, \vec{b} = \begin{pmatrix} 4 \\ 4 \\ m \end{pmatrix}, \vec{c} = \begin{pmatrix} 3 \\ -4 \\ 5 \end{pmatrix}$. Jika $\vec{a}$ tegak lurus $\vec{b}$, maka hasil dari $\vec{a} + 2\vec{b} - \vec{c} = \ldots$

Select one:

- $\vec{a} = \begin{pmatrix} 6 \\ 14 \\ 10 \end{pmatrix}$
- $\vec{a} = \begin{pmatrix} 6 \\ 14 \\ 12 \end{pmatrix}$
- $\vec{a} = \begin{pmatrix} 6 \\ 14 \\ 0 \end{pmatrix}$
- $\vec{a} = \begin{pmatrix} 6 \\ 14 \\ 6 \end{pmatrix}$
- $\vec{a} = \begin{pmatrix} 6 \\ 14 \\ 14 \end{pmatrix}$

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	
2	**6/04/22, 08:09**	**Saved: \(\vec{a}=\bigl(\begin{smallmatrix}6\\ 14\\ 6\end{smallmatrix}\bigr)\)**	**Answer saved**	

Question 9

Answer saved

Marked out of 1

Edit question

Himpunan penyelesaian dari $3x^2 - 2x - 8 > 0$ untuk $x \epsilon R$ adalah ....

Select one:

- $\{x \mid x < -\frac{4}{3} atau x > 2, x \epsilon R\}$
- $\{x \mid x < \frac{4}{3} atau x > 3, x \epsilon R\}$
- \left \{ x \mid -\frac{4}{3}
- $\{x \mid x < \frac{4}{3} atau x > 4, x \epsilon R\}$
- \left \{ x \mid -\frac{4}{3}

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	
2	**6/04/22, 08:09**	**Saved: \(\left \{ x \mid x< -\frac{4}{3}atau x> 2, x\epsilon R \right \}\)**	**Answer saved**	

Question 10

Not yet answered

Marked out of 1

Edit question

Jika x_1 dan x_2 adalah akar – akar persamaan kuadrat $x^2 + px + 1 = 0$, maka persamaan kuadrat yang akar – akarnya $\frac{2}{x_1} + \frac{2}{x_2}$ dan $x_1 + x_2$ adalah ...

Select one:

- $x^2 - 2p^2x + 3p = 0$
- $x^2 + p^2x + p = 0$
- $x^2 - 3px + 2p^2 = 0$
- $x^2 + 3px + 2p^2 = 0$
- $x^2 + 2px + 3p^2 = 0$

Response history

Step	Waktu	Action	State	Marks
1	**6/04/22, 08:07**	**Started**	**Not yet answered**	

Question 11

Not yet answered

Marked out of 1

Edit question

Persamaan $(1 - m)x^2 - (8 - 2m)x + 12 = 0$ (1 – m)x2 + (8 – 2m)x + 12 = 0\) mempunyai akar kembar, maka nilai m = ...

Select one:

- 2
- $\frac{3}{2}$

- $-\frac{3}{2}$
- -2
- 0

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 12

Not yet answered

Marked out of 1

Edit question

Jika sudut antara vektor $\vec{a} = \hat{i} + \sqrt{2}\hat{j} - p\hat{k}, \vec{b} = \hat{i} - \sqrt{2}\hat{j} + p\hat{k}$ adalah 60° maka p= ...

Select one:

- $\sqrt{2}$ atau $-\sqrt{2}$
- $\sqrt{5}$ atau $-\sqrt{5}$
- $-\frac{\sqrt{5}}{2}$ atau $\frac{\sqrt{5}}{2}$
- 1 atau -1
- $\frac{1}{2}$ atau $-\frac{1}{2}$

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 13

Not yet answered

Marked out of 1

Edit question

Absis titk balik grafik fungsi $f(x) = px^2 + (p-3)x + 2$ adalah p. Nilai p = ...

Select one:

- -3
- -1
- $\frac{2}{3}$
- $-\frac{3}{2}$
- 3

Response history

Step	Waktu	Action	State	Marks

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 14

Not yet answered

Marked out of 1

Edit question

Diketahui panjang vektor $|\bar{a}| = 2$ dan panjang vektor $|\bar{b}| = 4$, sudut antara vektor $\bar{a}$ dan $\bar{b}$ adalah 60° maka $\bar{a} + \bar{b} = \ldots$

Select one:

- $2\sqrt{5}$
- 12
- $7\sqrt{2}$
- $\sqrt{7}$
- $2\sqrt{7}$

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 15

Not yet answered

Marked out of 1

Edit question

Persamaan kuadrat $2x^2 - 5x - 3 = 0$ memiliki akar-akar dan . Persamaan kuadrat baru yang akar-akarnya $\frac{\alpha}{5}$ dan $\frac{\beta}{5}$ adalah ....

Select one:

- $2x^2 - x - 6 = 0$
- $50x^2 + 25x + 3 = 0$
- $50x^2 - 25x - 3 = 0$
- $2x^2 - 13x - 15 = 0$
- $50x^2 - 25x + 3 = 0$

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 16

Not yet answered

Marked out of 1

Jika akar-akar persamaan kuadrat $3x^2 - x - 2 = 0$ adalah dan . Nilai $\frac{1}{\alpha} + \frac{1}{\beta}$ adalah ...

Select one:

- $-\frac{1}{2}$

Edit question

- $\frac{1}{3}$
- $\frac{1}{6}$
- $\frac{2}{3}$
- $\frac{1}{9}$

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 17

Not yet answered

Marked out of 1

Edit question

Hasil kali vektor $\bar{a} = \begin{pmatrix} 2 \\ -2 \end{pmatrix}$ dan $\bar{b} = \begin{pmatrix} -3 \\ 4 \end{pmatrix}$ yang bersudut 60° adalah:

Select one:

- 8
- $5\sqrt{2}$
- 25
- $10\sqrt{2}$
- 23

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 18

Not yet answered

Marked out of 1

Edit question

A=(−1, 5, 4), B=(2, −1, −2), C=(3, p, q) Jika titik-titik A, B, dan C segaris maka nilai p dan q berturut-turut adalah....

Select one:

- -3 dan -4
- -1 dan -4
- 3 dan 0
- -1 dan 0
- -3 dan0

Response history

Step	Waktu	Action	State	Marks

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 19

Not yet answered

Marked out of 1

Edit question

Diketahui persamaan kuadrat $(p-1)x^2 - 4px + 5p + 6 = 0$. Nilai a agar persamaan tersebut memiliki akar kembar adalah...

Select one:

- p = -1 atau p = 2
- p = -3 atau p = 2
- p = 2 atau p = 2
- p = -2 atau p = 2
- p = 3 atau p = 2

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 20

Not yet answered

Marked out of 1

Edit question

Besar vektor dari titik A(3, -5) dan titik B (-2, 7) adalah ….

Select one:

- 144
- 13
- 169
- 10
- 12

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 21

Not yet answered

Marked out of 1

Edit question

Grafik fungsi yang titik baliknya di P(1, -4) dan memotong sumbu y di titik Q(2, -3) mempunyai persamaan ...

Select one:

- $y = x^2 - 2x - 3$
- $y = 2x^2 - 2x - 7$

- $y = x^2 - x - 4$
- $y = 2x^2 - x - 5$
- $y = x^2 - 2x - 7$

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 22

Not yet answered

Marked out of 1

Edit question

Persamaan $2x^2 + qx + (q-1) = 0$ mempunyai akar – akar x_1 dan x_2. Jika $x_1^2 + x_2^2 = 4$, maka nilai q = ...

Select one:

- -3 dan 5
- -2 dan 6
- -4 dan 4
- -6 dan 2
- -6 dan -2

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 23

Not yet answered

Marked out of 1

Edit question

Vektor $\overrightarrow{PQ} = (2,0,1)$ dan $\overrightarrow{PR} = (1,1,2)$ Jika $\overrightarrow{PS} = \frac{1}{2}\overrightarrow{PQ}$ maka vektor $\overrightarrow{RS} = \ldots$

Select one:

- $(-1, 0, -\frac{3}{2})$
- $(\frac{3}{2}, 1, 0)$
- $(\frac{1}{2}, 0, 1)$
- $(0, -1, -\frac{3}{2})$
- (1, -1, 1)

Response history

Step	Waktu	Action	State	Marks

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 24

Not yet answered

Marked out of 1

Edit question

Persamaan kuadrat $x^2 - 5x + 6 = 0$ mempunyai akar – akar x_1 dan x_2. Persamaan kuadrat yang akar – akarnya $x_1 - 3$ dan $x_2 - 3$ adalah ...

Select one:

- $x^2 - 2x = 0$
- $x^2 + x + 30 = 0$
- $x^2 + x = 0$
- $x^2 - 2x - 30 = 0$
- $x^2 - 2x + 30 = 0$

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 25

Not yet answered

Marked out of 1

Edit question

Akar-akar persamaan kuadrat $2x^2 + mx + 16 = 0$ adalah x_1 dan x_2. Jika $x_1 = 2x_2$ dan x_1, x_2 positif, nilai yang memenuhi adalah ...

m

Select one:

- -12
- 2
- -18
- -6
- -2

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 26

Not yet answered

Marked out of 1

Jika nilai diskriminan persamaan kuadrat $2x^2 - 9x + c = 0$ adalah 121, maka c = ...

Select one:

- 5

Edit question

- 8
- -8
- -5
- 2

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 27

Not yet answered

Marked out of 1

Edit question

Jika $\vec{u}$ dan $\vec{v}$ adalah dua vektor satuan yang membentuk sudut 45°, maka $(\vec{u}+\vec{v}) \bullet \vec{v} = \ldots$

Select one:

- $\sqrt{2}$
- $\frac{2+\sqrt{2}}{2}$
- $\frac{2+\sqrt{2}}{2}$
- $\frac{2-\sqrt{2}}{2}$
- $2\sqrt{2}$

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 28

Not yet answered

Marked out of 1

Edit question

Akar-akar persamaan kuadrat \(2 x^{^{2}} + x-6=0)\ adalah...

Select one:

- -6 dan 2
- 2 dan $1\frac{1}{2}$
- -4 dan 3
- -2 dan $1\frac{1}{2}$
- 4 dan 3

Response history

Step	Waktu	Action	State	Marks

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 29

Not yet answered

Marked out of 1

Edit question

Nilai maksimum dari fungsi $f(x) = -2x^2 + (k+5)x + 1 - 2k$ adalah 5. Nilai k yang positif adalah ...

Select one:

- 6
- 7
- 8
- 9
- 5

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Question 30

Not yet answered

Marked out of 1

Edit question

Diketahui vektor $\vec{a} = \hat{i} + 2\hat{j} - x\hat{k}, \vec{b} = 3\hat{i} - 2\hat{j} + \hat{k}, \vec{c} = -2\hat{i} + \hat{j} + 2\hat{k}$. Jika $\vec{a}$ tegak lurus $\vec{c}$, maka nilai dari $(\vec{a} + \vec{b}) \bullet (\vec{a} - \vec{c})$ adalah .....

Select one:

- 0
- -4
- 2
- 4
- -2

Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:07	Started	Not yet answered	

Finish review