



M. RIZKI ASBOLLAH [11-ATUg-2]

**Started on** Wednesday, 6 April 2022, 08:14

**State** Overdue

**Question 1**

Answer saved

Marked out of 1



Edit question

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

Select one:

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

### Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:16	Saved: $((0, -1, -\frac{3}{2}))$	Answer saved	

**Question 2**

Answer saved

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:

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

### Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	

Step	Waktu	Action	State	Marks
2	6/04/22, 08:19	Saved: \ (x <sup>2</sup> -3px+2p <sup>2</sup> =0\)	Answer saved	

### Question 3

Answer saved

Marked out of 1



Edit question

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

Select one:

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

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:21	Saved: -6 dan 2	Answer saved	

### Question 4

Answer saved

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:

- 9
- 6
- 7
- 5
- 8

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:22	Saved: 7	Answer saved	

**Question 5**

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  $\vec{a} + 2\vec{b} - \vec{c} = \dots$  |

Select one:

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

**Response history**

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:25	Saved: $\vec{a} = \begin{pmatrix} 6 \\ 14 \\ 12 \end{pmatrix}$	Answer saved	

**Question 6**

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:

- 30
- 45
- 100
- 60
- 90

**Response history**

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:26	Saved: 90	Answer saved	

**Question 7**

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:

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

**Response history**

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:27	Saved: $(7\hat{i} + 8\hat{j} - 2\hat{k})$	Answer saved	

**Question 8**

Answer saved

Marked out of 1



Edit question

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

Select one:

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

**Response history**

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:28	Saved: -2	Answer saved	

**Question 9**

Answer saved

Marked out of 1



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:

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

Edit question

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

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:30	Saved: $(x^2+x=0)$	Answer saved	

### Question 10

Answer saved

Marked out of 1



Edit question

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

Select one:

- 13
- 10
- 12
- 144
- 169

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:31	Saved: 169	Answer saved	

### Question 11

Answer saved

Marked out of 1



Edit question

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

Select one:

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

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:32	Saved: $\left(\frac{2}{3}\right)$	Answer saved	

### Question 12

Answer saved

Marked out of 1



Edit question

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

Select one:

- 5
- 5
- 8
- 2
- 8

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:33	Saved: -5	Answer saved	

### Question 13

Answer saved

Marked out of 1



Edit question

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

Select one:

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

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:33	Saved: $\left(\frac{1}{2}\right)$	Answer saved	

**Question 14**

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  $\vec{AB} : \vec{BC}$  adalah ....

Select one:

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

**Response history**

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:34	Saved: 1:2	Answer saved	

**Question 15**

Answer saved

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:

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

**Response history**

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:35	Saved: $(2x^2 - 13x - 15 = 0)$	Answer saved	

**Question 16**

Answer saved

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:

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

- $y = x^2 - x - 4$
- $y = x^2 - 2x - 7$
- $y = x^2 - 2x - 3$

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:36	Saved: $(y=2x^2-x-5)$	Answer saved	

### Question 17

Answer saved

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  $q = \dots$

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, 08:14	Started	Not yet answered	
2	6/04/22, 08:37	Saved: -6 dan 2	Answer saved	

### Question 18

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:

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

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:39	Saved: $\left(\frac{5\sqrt{3}}{14}\right)$	Answer saved	

### Question 19

Answer saved

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  $60^\circ$  maka  $p = \dots$

Select one:

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

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:40	Saved: 1 atau -1	Answer saved	

### Question 20

Answer saved

Marked out of 1



Edit question

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

Select one:

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

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	

Step	Waktu	Action	State	Marks
2	6/04/22, 08:41	Saved: 23	Answer saved	

### Question 21

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:

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

### Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:42	Saved: $(f(x) = 2x^2 - 12x + 16)$	Answer saved	

### Question 22

Answer saved

Marked out of 1



Edit question

Himpunan penyelesaian dari  $3x^2 - 2x - 8 > 0$  untuk  $x \in \mathbb{R}$  adalah ....

Select one:

- $\left\{ x \mid -\frac{4}{3} < x < 2, x \in \mathbb{R} \right\}$
- $\left\{ x \mid -\frac{4}{3} < x < 3, x \in \mathbb{R} \right\}$
- $\left\{ x \mid x < -\frac{4}{3} \text{ atau } x > 2, x \in \mathbb{R} \right\}$
- $\left\{ x \mid x < \frac{4}{3} \text{ atau } x > 4, x \in \mathbb{R} \right\}$
- $\left\{ x \mid x < \frac{4}{3} \text{ atau } x > 3, x \in \mathbb{R} \right\}$

### Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:43	Saved: $\left( \left\{ x \mid x < -\frac{4}{3} \text{ atau } x > 2, x \in \mathbb{R} \right\} \right)$	Answer saved	

**Question 23**

Answer saved

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:

- 2
- 18
- 12
- 2
- 6

**Response history**

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:44	Saved: -12	Answer saved	

**Question 24**

Answer saved

Marked out of 1



Edit question

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

Select one:

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

**Response history**

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:45	Saved: $p = -2$ atau $p = 2$	Answer saved	

**Question 25**

Answer saved

Marked out of 1



Edit question

Diketahui panjang vektor  $|\vec{a}| = 2$  dan panjang vektor  $|\vec{b}| = 4$ , sudut antara vektor  $\vec{a}$  dan  $\vec{b}$  adalah  $60^\circ$  maka  $|\vec{a} + \vec{b}| = \dots$

Select one:

- $7\sqrt{2}$

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

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:46	Saved: $\sqrt{2\sqrt{7}}$	Answer saved	

### Question 26

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:

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

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:46	Saved: $\frac{1}{3}$	Answer saved	

### Question 27

Answer saved

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:

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

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	<b>6/04/22, 08:47</b>	<b>Saved: -3 dan -4</b>	<b>Answer saved</b>	

### Question 28

Answer saved

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  $(\vec{a} + \vec{b}) \cdot (\vec{a} - \vec{c})$  adalah .....

Select one:

- 4
- 4
- 0
- 2
- 2

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	<b>6/04/22, 08:48</b>	<b>Saved: 0</b>	<b>Answer saved</b>	

### Question 29

Answer saved

Marked out of 1



Edit question

Jika  $\vec{u}$  dan  $\vec{v}$  adalah dua vektor satuan yang membentuk sudut  $45^\circ$ , maka  $(\vec{u} + \vec{v}) \cdot \vec{v} = \dots$  |

Select one:

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

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	

Step	Waktu	Action	State	Marks
2	6/04/22, 08:49	Saved: $\sqrt{2}$	Answer saved	

### Question 30

Answer saved

Marked out of 1



Edit question

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

Select one:

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

## Response history

Step	Waktu	Action	State	Marks
1	6/04/22, 08:14	Started	Not yet answered	
2	6/04/22, 08:50	Saved: -1	Answer saved	

Finish review