

النموذج (ب)

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-١

$$(ج) \quad ١٥ = ١$$

-٢

$$(ح) \quad ١٦ = (٢-٤)^2 + (٣+٥)^2 + (٢-٥)^2$$

-٣

$$(ج) \quad ٥ = ٤$$

-٤

$$(پ) \quad \overline{١١} = (١-٢-٢-١)$$

$$\overline{١٠} = (١-٤-١)$$

$$(١) \quad \text{مما} \quad (٢٠٤١) = \frac{\overline{١١} \cdot \overline{١٠}}{\overline{١٦+١٧} \cdot \overline{٩+٢+١٧}} = \frac{(١-٢-٢-١) \cdot (١-٤-١)}{(١-٢-٢-١) \cdot (١-٤-١)}$$

$$(١) \quad \text{مما} \quad (١١٧) = \frac{٧-١}{\overline{١٧} \cdot \overline{١٢٧}} = \frac{٨-١}{\overline{١٧} \cdot \overline{١٢٧}}$$

$$(٢) \quad \overline{١٠} - \overline{١٠} = \overline{١٠} \quad \text{مما} \quad \overline{١٠} + \overline{١٠} = \overline{١٠}$$

$$(٢٠٤١) + (١٠٤١) = (٢٠٩٢)$$

$$\overline{١٠} = (٢٠٩٢)$$

$$\text{المركبة الإحصائية} = \frac{\overline{١٠} \cdot \overline{١٠}}{\overline{١٦+١٧} \cdot \overline{٩+٢+١٧}}$$

$$(٢٠٤١) \cdot (١٠٤١) \cdot (٢٠٩٢) = ٩ + ٢ + ١$$

$$(١) \quad \left(\frac{٩}{٢}, \frac{٣}{٢}, \frac{٣}{٢} \right) = \left(٢, ١, ١ \right) \frac{٩+١٢+٠}{١٤} =$$

(د) (ر) جميع متوازيات السطح = $|\vec{u} \times \vec{v} \cdot \vec{P}| = \left(\frac{1}{2}\right)$

$$(1-c) + (11-c) - (7)1 = \begin{vmatrix} 2 & 4 & 1 \\ 1 & 2 & 3 \\ 4 & 1 & -1 \end{vmatrix} = 49 \text{ وحدة حجم}$$

(د) (ر) $\vec{u} + \vec{v} = \begin{vmatrix} \vec{u} & \vec{v} & \vec{w} \\ 2 & 4 & 1 \\ 1 & 2 & 3 \end{vmatrix} = \vec{u} \times \vec{v}$

(أ) $|\vec{u} \cdot \vec{v}| = \sqrt{(16) + (7-7)} = \|\vec{u} \times \vec{v}\|$ \therefore

$|\vec{u} \cdot \vec{v}| = \|\vec{u} \times \vec{v}\|$ \therefore مساحة القاعدة المربعة بالمختص $\vec{u} \cdot \vec{v} = \|\vec{u} \times \vec{v}\|$ وحدة مساحة

$\frac{49}{5\sqrt{7}} = \frac{\text{المجيب}}{\text{ساحة القاعدة}} = \text{ارتفاع}$

(أ) $\left\{ \begin{array}{l} \text{وحدة طول} \\ \frac{5\sqrt{7}}{3,13} \approx 6 \end{array} \right.$

(تراجع الحلول الأخرى)

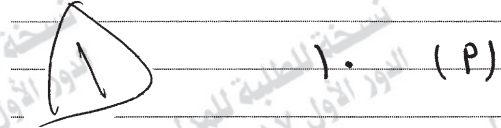
النموذج (ب)

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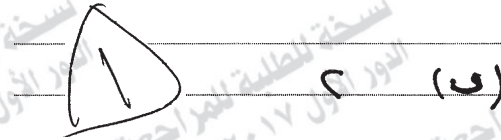
-٥



-٦



-٧



$$\begin{array}{ccc|c} 1 & 1 & 1 & \\ \hline 2 & 3 & 4 & \\ \hline 3 & 4 & 5 & \end{array}$$

$$\begin{array}{ccc|c} 1 & 1 & 1 & \\ \hline 2 & 3 & 4 & \\ \hline 3 & 4 & 5 & \end{array} = \Delta \begin{array}{c} 14 - 14 \\ \hline 14 - 14 \end{array}$$

$$\begin{array}{ccc|c} 1 & 1 & 1 & \\ \hline 2 & 3 & 4 & \\ \hline 3 & 4 & 5 & \end{array} = \Delta \begin{array}{c} 14 - 14 \\ \hline 14 - 14 \end{array}$$

$$\begin{array}{ccc|c} 1 & 1 & 1 & \\ \hline 2 & 3 & 4 & \\ \hline 3 & 4 & 5 & \end{array} = \Delta \begin{array}{c} 14 - 14 \\ \hline 14 - 14 \end{array}$$

$$\begin{array}{ccc|c} 1 & 1 & 1 & \\ \hline 2 & 3 & 4 & \\ \hline 3 & 4 & 5 & \end{array} = \Delta \begin{array}{c} 14 - 14 \\ \hline 14 - 14 \end{array}$$

$$\begin{array}{ccc|c} 1 & 1 & 1 & \\ \hline 2 & 3 & 4 & \\ \hline 3 & 4 & 5 & \end{array} = \Delta \begin{array}{c} 14 - 14 \\ \hline 14 - 14 \end{array}$$

(تراجعى الحلول الأخرى)

-٩

(ع) $\frac{\pi}{1}$

-١٠

(ح) $\frac{\pi}{5}$

-١١

(د) $\frac{r^2}{r^2+1} = \frac{r^2}{r^2+1} \cdot \frac{r^2}{r^2} = \frac{r^4}{r^4+r^2}$
 (هـ) $\frac{r^2}{r^2+1} = \frac{r^2}{r^2+1} \cdot \frac{r^2}{r^2} = \frac{r^4}{r^4+r^2}$

بوضع $r^2 = x$ $\frac{x}{x+1} = \frac{x}{x+1} \cdot \frac{x}{x} = \frac{x^2}{x^2+x}$

بجمع $\frac{x^2}{x^2+x} = \frac{x^2}{x^2+x} \cdot \frac{x}{x} = \frac{x^3}{x^3+x^2}$

(و) $\frac{x^2}{x^2+x} = \frac{x^2}{x^2+x} \cdot \frac{x}{x} = \frac{x^3}{x^3+x^2}$

ترتيب الحد الأوسط $\frac{x^2}{x^2+x} = \frac{x^2}{x^2+x} \cdot \frac{x}{x} = \frac{x^3}{x^3+x^2}$

(ز) $\frac{x^2}{x^2+x} = \frac{x^2}{x^2+x} \cdot \frac{x}{x} = \frac{x^3}{x^3+x^2}$
 $\frac{1}{\sqrt{2}} = \frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$

(ح) حل آخر: $\frac{x^2}{x^2+x} = \frac{x^2}{x^2+x} \cdot \frac{x}{x} = \frac{x^3}{x^3+x^2}$

(ط) $\frac{x^2}{x^2+x} = \frac{x^2}{x^2+x} \cdot \frac{x}{x} = \frac{x^3}{x^3+x^2}$

بوضع $r^2 = x$ $\frac{x}{x+1} = \frac{x}{x+1} \cdot \frac{x}{x} = \frac{x^2}{x^2+x}$

(ث) $\frac{x}{x+1} = \frac{x}{x+1} \cdot \frac{x}{x} = \frac{x^2}{x^2+x}$

ترتيب الحد الأوسط $\frac{x}{x+1} = \frac{x}{x+1} \cdot \frac{x}{x} = \frac{x^2}{x^2+x}$

(ج) معادل $\frac{1}{\sqrt{2}} = \frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$

$$\vec{p} \cdot \vec{v} = \vec{r} \cdot \vec{v}$$

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$$(0.61 - 0.6) \cdot (7 - 6) = \vec{r} \cdot (7 - 6)$$

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$$0.01 \cdot 1 = \vec{r} \cdot (7 - 6)$$

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$$0.01 = 1 \cdot r + (0 - r) \cdot 1 + (0 - r) \cdot 1$$

الصورة القياسية

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$$0.01 = r + 0 - r - r$$

الصورة العامة

(تراعى الحلول الأخرى)

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$$(u) \quad (1 \ 6 \ 1) \quad \triangle$$

- ١٤

... المتعمق يصنع زوايا متساوية مع الاتجاهات

الموجب لمحاور الإحداثيات

$$\therefore \cos \theta = \cos \theta = \cos \theta$$

$$\therefore \cos \theta = \cos \theta + \cos \theta = 1$$

$$\therefore \cos \theta = \cos \theta = \cos \theta = \frac{1}{3}$$

$$\triangle \quad \therefore \cos \theta = \cos \theta = \cos \theta = \frac{1}{\sqrt{3}}$$

$$\therefore \text{تجاه اتجاه المتعمق} = \left(\frac{1}{\sqrt{3}}, \frac{1}{\sqrt{3}}, \frac{1}{\sqrt{3}} \right)$$

$$(1 \ 6 \ 1) = 1$$

$$\triangle \quad \begin{aligned} & \text{المستوي} \\ & \text{المستوي} \\ & \text{المستوي} \end{aligned}$$

$$\begin{aligned} & \text{المستوي} \\ & \text{المستوي} \\ & \text{المستوي} \end{aligned}$$



$$\frac{1}{\sqrt{3}} + \frac{1}{\sqrt{3}} = \frac{2}{\sqrt{3}} = \frac{2}{\sqrt{3}}$$

$$\triangle \quad 1 + \frac{1}{\sqrt{3}} = \frac{2}{\sqrt{3}} = \frac{2}{\sqrt{3}}$$

$$\begin{pmatrix} 7 \\ 4 \\ 1 \end{pmatrix} = \begin{pmatrix} 5 \\ 3 \\ 2 \end{pmatrix} \begin{pmatrix} 2 & 3 & 0 \\ 0 & 1 & 0 \\ 1 & 2 & 1 \end{pmatrix} \therefore$$

$$(11-)\alpha + (0-)\beta = \begin{vmatrix} 2 & 3 & 0 \\ 0 & 1 & 0 \\ 1 & 2 & 1 \end{vmatrix} = |P|$$

3 $\neq 37 =$

$$\begin{pmatrix} 2 & 3 & 0 \\ 0 & 1 & 0 \\ 10 & 2 & 11 \end{pmatrix} = \begin{pmatrix} 2 & 3 & 0 \\ 0 & 1 & 0 \\ 10 & 2 & 11 \end{pmatrix} = P \therefore$$

1/3

$$\begin{pmatrix} 2 & 3 & 0 \\ 0 & 1 & 0 \\ 10 & 2 & 11 \end{pmatrix} \frac{1}{37} = \begin{pmatrix} 2 & 3 & 0 \\ 0 & 1 & 0 \\ 10 & 2 & 11 \end{pmatrix} \frac{1}{|P|} = P^{-1}$$

1/3

$$\begin{pmatrix} 7 \\ 4 \\ 1 \end{pmatrix} \begin{pmatrix} 2 & 3 & 0 \\ 0 & 1 & 0 \\ 10 & 2 & 11 \end{pmatrix} \frac{1}{37} = \begin{pmatrix} 5 \\ 3 \\ 2 \end{pmatrix} \therefore$$

1/3

$$\begin{pmatrix} 1 \\ 1 \\ 2 \end{pmatrix} = \begin{pmatrix} 37 \\ 37 \\ 74 \end{pmatrix} \frac{1}{37}$$

$$\alpha = 1 \quad \beta = 1 \quad \gamma = 2$$

1/3

(تراجعى الحلول الأخرى)

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$$\triangle 1 \quad (c) \quad 3, 9, 27$$

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$$\triangle 1 \quad (c) \quad 2 \text{ جتا } 0$$

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$$\triangle 1 \quad (c) \quad (2-6, 1, 6, 1) + (3-6, 1, 6, 2) = 5$$

$$\frac{t + 3v}{t + 3v} \cdot \frac{(t + 3v)}{t - 3v} = 8 \quad (P)$$

$$\frac{(t + 3v)(t + 3v)}{t - 3v} = 8$$

$$\frac{t^2 + 6tv + 9v^2}{t - 3v} = 8$$

$$t^2 + 6tv + 9v^2 = 8(t - 3v) \Rightarrow t^2 + 6tv + 9v^2 = 8t - 24v$$

$$t^2 + 6tv + 9v^2 - 8t + 24v = 0$$

$$t^2 + (6v - 8)t + (9v^2 + 24v) = 0$$

$$t = \frac{-(6v - 8) \pm \sqrt{(6v - 8)^2 - 4(9v^2 + 24v)}}{2}$$

عند $v = 0$: $t = \frac{-(-8) \pm \sqrt{64 - 0}}{2} = \frac{8 \pm 8}{2}$
 عند $v = 1$: $t = \frac{-(6 - 8) \pm \sqrt{(6 - 8)^2 - 4(9 + 24)}}{2} = \frac{2 \pm \sqrt{4 - 120}}{2}$
 عند $v = -1$: $t = \frac{-(-6 - 8) \pm \sqrt{(-6 - 8)^2 - 4(9 - 24)}}{2} = \frac{14 \pm \sqrt{196 - 60}}{2}$

$$(B) \quad \frac{(t^2 + 6tv + 9v^2)(t + 3v)}{(t^2 + 6tv + 9v^2)(t - 3v)} = 8$$

$$\frac{t^2 + 6tv + 9v^2}{t - 3v} = 8$$

$$\frac{t^2 + 6tv + 9v^2}{t - 3v} = 8$$

$$\frac{t^2 + 6tv + 9v^2}{t - 3v} = 8 \Rightarrow t^2 + 6tv + 9v^2 = 8t - 24v$$

$$t^2 + 6tv + 9v^2 - 8t + 24v = 0$$

(تراجعى الحلول الأخرى)

انتهت الإجابة وتراجعى الحلول الأخرى