MATHEMATICS

1. Let, ρ be the relation on $\mathbb{R}$ (set of all real numbers) defined by $\rho = \{(a,b): a,b \in \mathbb{R}, a^2 + b^2 = 1\}$, then ρ is

(A) symmetric and transitive

(B) symmetric but neither reflexive nor transitive

(C) transitive but neither reflexive nor symmetric

(D) None of the above

1ú ³ì> A¡¹, $\rho = \{(a,b): a,b \in \mathbb{R}, a^2 + b^2 = 1\}$ &A¡[i¡ Îš´A¢¡ ë™Jàì> $\mathbb{R}$ Î³Ñz¤àÑz¤ Î}Jà¸¹ ëÎi¡, ρ Î´šA¡¢[i¡ Òì¤

(A) [Îì³[i¡öA¡ &¤} i¡öà[X[i¡®¡

(B) [Îì³[i¡öA¡ [A¡"ñ [¹ìóÃ¡[G®¡ ¤à i¡öà[X[i¡®¡ >Ú

(C) i¡öà[X[i¡®¡ [A¡"ñ[¹ìóÃ¡[G®¡ ¤à [Îì³[i¡öA¡ >Ú

(D) l¡üšì¹¹ ëA¡àì>à[i¡Òü >Ú

2. If $[x]$ denotes the greatest integer less than or equal to x, then the range of the function $f(x) = [x] - x$ is

(A) $[0,1)$ (B) $(-1,0]$

(C) $(-\infty,\infty)$ (D) $(-1,1)$

2ú ™[ƒ $[x]$, &A¡[i¡ Îì¤¢àZW¡ šèo¢Î}Jà¸ ë¤àc¡àÚ ™à&¹ ë=ìA¡ ëáài¡ ¤à Î³à> ($\leq x$) ÒÚ, t¡ì¤ $f(x) = [x] - x$ "ìšÛ¡A¡[i¡¹ [¤Ñzà¹ "e¡º[i¡ Òì¤

(A) $[0,1)$ (B) $(-1,0]$

(C) $(-\infty,\infty)$ (D) $(-1,1)$

3. z is a complex number such that $|z-1|+|z+1| \le 4$. Then z lies in Argand plane

(A) on the boundary and in the interior of an ellipse

(B) on the boundary and in the interior of a circle

(C) in the interior of a hyperbola

(D) None of the above

3ú \[i¡º ¹à[Å z ™[ƒ $|z-1|+|z+1| \le 4$ ÎšˊA¢¡[i¡ìA¡ [Î‡ý¡ A¡ì¹, t¡àÒìº "à¹Ksi¡ t¡ìº z -&¹ "¤Ñ,à> Òì¤

(A) &A¡[i¡ l¡üš¤õìv¡¹ l¡üšì¹ &¤} [®¡t¡ì¹

(B) &A¡[i¡ ¤õìv¡¹ l¡üšì¹ &¤} [®¡t¡ì¹

(C) &A¡[i¡ š¹à¤õìv¡¹ [®¡t¡ì¹

(D) l¡üšì¹¹ ëA¡à>[i¡Òü >Ú

4. Solution of the differential equation $x^2(x\,dx+y\,dy)+2y(x\,dy-y\,dx)=0$, subject to the condition $y(1)=0$, is

(A) $(x^2+y^2)(x-2)^2=4x^2$

(B) $(x^2+y^2)(x+2)^2=9x^2$

(C) $(x^2-y^2)(x+2)^2=4x^2$

(D) $(x^2-y^2)(x-2)^2=9x^2$

4ú $x^2(x\,dx+y\,dy)+2y(x\,dy-y\,dx)=0$ &Òü"¤A¡º Î³ãA¡¹o[i¡¹ $y(1)=0$ Åt¢¡ ë³ì> ë™ Î³à‹à> Òì¤, t¡à Òº

(A) $(x^2+y^2)(x-2)^2=4x^2$

(B) $(x^2+y^2)(x+2)^2=9x^2$

(C) $(x^2-y^2)(x+2)^2=4x^2$

(D) $(x^2-y^2)(x-2)^2=9x^2$

5. In the quadratic equation $ax2+bx+c=0$, if $\Delta = b2-4ac$ and $\alpha+\beta,\ \alpha2+\beta2,\ \alpha3+\beta3$ are in GP, where α, β are the roots of $ax^2+bx+c=0$, then

(A) $\Delta \neq 0$

(B) $b\Delta = 0$

(C) $c\Delta = 0$

(D) $\Delta = 0$

5ú $ax2+bx+c=0$ [‡Qàt¡ Î³ãA¡¹ìo¹ ¤ã\‡Ú Òº α * β, ™[ƒ $\alpha+\beta,\ \alpha2+\beta2,\ \alpha3+\beta^3$ GP ët¡ =àìA¡ &¤} $\Delta = b^2-4ac$ ÒÚ, t¡àÒìº

(A) $\Delta \neq 0$

(B) $b\Delta = 0$

(C) $c\Delta = 0$

(D) $\Delta = 0$

6. The value of $\tan^{-1}\left(\frac{\sin 2-1}{\cos 2}\right)$ is

(A) $\frac{\pi}{2}-1$

(B) $1-\frac{\pi}{4}$

(C) $2-\frac{\pi}{2}$

(D) $\frac{\pi}{4}-1$

6ú $\tan^{-1}\left(\frac{\sin 2-1}{\cos 2}\right)$ -&¹ ³à> Òº

(A) $\frac{\pi}{2}-1$

(B) $1-\frac{\pi}{4}$

(C) $2-\frac{\pi}{2}$

(D) $\frac{\pi}{4}-1$

7. The mean and standard deviation of 100 observations were found to be 40 and 10 respectively. If at the time of calculation two observations were wrongly taken as 30 and 70 in place of 3 and 27 respectively, then the correct standard deviation is

(A) 8·24 (B) 9·24

(C) 10·24 (D) 7·24

7ú 100 [i¡ š™¢ì¤Û¡ìo¹ KØl¡ (mean) &¤} Î³A¸¡ [¤W¡ą̊¸[t¡ (standard deviation) Ò̀º ™=àyû¡ì³ 40 &¤} 10. ™[ƒ [ÒìÎì¤¹ Î³Ú ƒå[i¡ š™¢ì¤Û¡o 30 &¤} 70 ëA¡ ®å¡º A¡ì¹ ™=àyû¡ì³ 3 &¤} 27 &¹ š[¹¤ìt¢¡ ë>*Úà ÒìÚ =àìA¡, t¡àÒ̀ìº Î[k¡A¡ Î³A¸¡ [¤W¸å¡[t¡ Òì¤

(A) 8·24 (B) 9·24

(C) 10·24 (D) 7·24

8. The statement $(p \rightarrow r) \vee (q \rightarrow r)$ is logically equivalent to

(A) $(p \wedge q) \vee r$

(B) $(p \vee q) \rightarrow r$

(C) $(p \wedge q) \rightarrow r$

(D) $(p \rightarrow q) \rightarrow r$

8ú $(p \rightarrow r) \vee (q \rightarrow r)$ l¡ü[v¡û¡[i¡¹ Î³tå¡º¸ l¡ü[v¡û¡[i¡ Òì¤

(A) $(p \wedge q) \vee r$

(B) $(p \vee q) \rightarrow r$

(C) $(p \wedge q) \rightarrow r$

(D) $(p \rightarrow q) \rightarrow r$

9. The normals to the curve $y = x^2 - x + 1$, drawn at the points with the abscissa $x_1 = 0$, $x2 = -1$ and $x3 = \frac{5}{2}$ are

(A)parallel to each other (B)pairwise perpendicular

(C) concurrent (D)not concurrent

9ú $y=x2-x+1$ ¤yû¡ì¹Jà¹ ë™ Î¤ [¤@ƒåì®å\ $x_1 = 0$, $x_2 = -1$, $x_3 = \frac{5}{2}$ &¤} ëÎÒ ü [¤@Pƒå[ºìt¡ "[S¡t¡ "[®¡º¬´P¡[º

(A)š¹Ñš¹ Î³à"z¹àº (B) šø[t¡ ™åKº &ìA¡ "šì¹¹ I¡üš¹ º¬´

(C) Î³[¤@ƒå (D) Î³[¤@ƒå >Ú

10. In a triangle ABC if $\sin A \sin B = \frac{ab}{c2}$, then the triangle is

(A) equilateral (B) isosceles

(C)right angled (D)None of the above

10ú ABC [y®å¡ì\ $\sin A \sin B = \frac{ab}{c2}$ Òìº, ABC [y®å¡\[i¡ Òì¤

(A) Î³¤à× (B) Î³[‡¤à×

(C) Î³ìA¡àoã (D)I¡üšì¹¹ ëA¡à>[i¡Ò ü>Ú

11. The area of the region bounded by $y = |x|$ and $y = -|x| + 2$ is

(A)4 sq.units (B)3 sq.units

(C)2 sq.units (D)1 sq.unit

11ú $y=|x|$ &¤} $y = -|x|+2$ ‡à¹à Îã³à¤‡ý¡ "e¡ìº¹ ëÛ¡yó¡º Òº

(A)4 ¤K ¢&A¡A¡ (B)3 ¤K ¢&A¡A¡

(C)2 ¤K ¢&A¡A¡ (D)1 ¤K ¢&A¡A¡

12. If $\begin{vmatrix} x+p & q & r \\ q & x+r & p \\ r & p & x+q \end{vmatrix} = 0$, then the values of x are

(A) $-(p+q+r), \pm\sqrt{p^2+q^2+r^2+pq+qr+rp}$

(B) $\pm(p^2+q^2+r^2), \pm\sqrt{p^2+q^2+r^2+pq+qr+rp}$

(C) $0, \pm(p+q+r)$

(D) $-(p+q+r), \pm\sqrt{p^2+q^2+r^2-pq-qr-rp}$

12ú ™[ƒ $\begin{vmatrix} x+p & q & r \\ q & x+r & p \\ r & p & x+q \end{vmatrix} = 0$ ÒÚ, t¡ì¤ x-&¹ ³à>P¡[º Òì¤

(A) $-(p+q+r), \pm\sqrt{p^2+q^2+r^2+pq+qr+rp}$

(B) $\pm(p^2+q^2+r^2), \pm\sqrt{p^2+q^2+r^2+pq+qr+rp}$

(C) $0, \pm(p+q+r)$

(D) $-(p+q+r), \pm\sqrt{p^2+q^2+r^2-pq-qr-rp}$

13. If $y = \left\{\log_e\left(x+\sqrt{x^2+a^2}\right)\right\}^2$, then $(x^2+a^2)\frac{d^2y}{dx^2} + x\frac{dy}{dx} = ?$

(A) 2

(B) a^2y

(C) $-a^2y$

(D) -2

13ú ™[ƒ $y = \left\{\log_e\left(x+\sqrt{x^2+a^2}\right)\right\}^2$ ÒÚ, t¡àÒìº $(x^2+a^2)\frac{d^2y}{dx^2} + x\frac{dy}{dx} = ?$

(A) 2

(B) a^2y

(C) $-a^2y$

(D) -2

14. $\int_0^{\pi} \frac{x\tan x}{\sec x+\tan x}\,dx = ?$

(A) $\frac{\pi}{2}-1$

(B) $\pi\left(\frac{\pi}{2}+1\right)$

(C) $\frac{\pi}{2}+1$

(D) $\pi\left(\frac{\pi}{2}-1\right)$

14ú $\int_0^{\pi} \frac{x\tan x}{\sec x+\tan x}\,dx = ?$

(A) $\frac{\pi}{2}-1$

(B) $\pi\left(\frac{\pi}{2}+1\right)$

(C) $\frac{\pi}{2}+1$

(D) $\pi\left(\frac{\pi}{2}-1\right)$

15. $\int \frac{e^x(x^2+1)}{(x+1)^2}\,dx = ?$

(A) $e^x\left(\frac{x-1}{x+1}\right)+C$

(B) $e^x\frac{1}{(x+1)^2}+C$

(C) $e^x\left(\frac{x+1}{x-1}\right)+C$

(D) $e^x\frac{1}{x^2+1}+C$

15ú $\int \frac{e^x(x^2+1)}{(x+1)^2}\,dx = ?$

(A) $e^x\left(\frac{x-1}{x+1}\right)+C$

(B) $e^x\frac{1}{(x+1)^2}+C$

(C) $e^x\left(\frac{x+1}{x-1}\right)+C$

(D) $e^x\frac{1}{x^2+1}+C$

16. If $c_0, c_1, c_2, \ldots\ldots, c_n$ denote the coefficients in the expansion of $(1+x)^n$, then the value of $c_1 + 2c_2 + 3c_3 + \ldots + nc_n$ is

(A) $(n+1)2^{n-1}$ (B) $n2^{n-1}$

(C) $(n+1)2^n$ (D) $(n+2)2^{n-1}$

16ú $(1+x)^n$ -&¹ [¤Ñzõ[t¡¹ ÎÒKP¡[º ™[ƒ $c_0, c_1, c_2, \ldots\ldots, c_n$ ÒÚ, t¡àÒìº $c_1 + 2c_2 + 3c_3 + \ldots + nc_n$-&¹ ³à> Òì¤

(A) $(n+1)2^{n-1}$ (B) $n2^{n-1}$

(C) $(n+1)2^n$ (D) $(n+2)2^{n-1}$

17. If $\sec ax + \sec bx = 0$, then the values of x form

(A) two arithmetic progressions

(B) two geometric progressions

(C) one arithmetic progression and one geometric progression

(D) None of the above

17ú ™[ƒ $\sec ax + \sec bx = 0$ ÒÚ, t¡ì¤ x-&¹ ³à>Î³èÒ

(A) ƒå[i¡ Î³à”z¹ šøK[t¡ Kk¡> A¡ì¹

(B) ƒå[i¡ P¡ì>àv¡¹ šøK[t¡ Kk¡> A¡ì¹

(C) &A¡[i¡ Î³à”z¹ šøK[t¡ &¤} &A¡[i¡ P¡ì>àv¡¹ šøK[t¡ Kk¡> A¡ì¹

(D) l¡üšì¹¹ ëA¡à>[i¡Òü >Ú

18. If the function $f(x) = x^3 + bx2 + ax + 5$ satisfies Rolle's theorem on [1,3] with $\in 2 + \frac{1}{\sqrt{3}}$, then

(A) $a = 11, b = -6$ (B) $a = 11, b = 6$

(C) $a = -11, b = 6$ (D) $a = -11, b = -6$

18ú ™[ƒ $c = 2 + \frac{1}{\sqrt{3}}$ -&¹ \>¸ [1,3] [¤Ñàzì¹ $f(x) = x^3 + bx2 + ax + 5$ "ìšÛ¡A¡[i¡ Rolle's theoremëA¡ [Î‡¡ý A¡ì¹, t¡àÒì°

(A) $a = 11, b = -6$ (B) $a = 11, b = 6$

(C) $a = -11, b = 6$ (D) $a = -11, b = -6$

19. A function whose graph is symmetrical about y-axis is given by

(A) $f(x) = \log e(x + \sqrt{x^2 + 1})$ (B) $f(x + y) = f(x) + f(y), \ \forall x, y \in R$

(C) $f(x) = \cos x + \sin x$ (D) None of the above

19ú [>ì•´¹ ë™ "ìšÛ¡A¡[i¡¹ Køàó¡ y-"ìÛ¡¹ Îàìšîl Û¡ šø[t¡Î³, ëÎ[i¡ Ò°

(A) $f(x) = \log e(x + \sqrt{x^2 + 1})$ (B) $f(x + y) = f(x) + f(y), \ \forall x, y \in R$

(C) $f(x) = \cos x + \sin x$ (D) l¡üšî¹¹ ëA¡à>[i¡Òü >Ú

20. Let, the variables x_1 and x_2 satisfy the following conditions :

$$3x_1 + x_2 \leq 15$$
$$3x_1 + 4x_2 \leq 24$$
$$x_1, x_2 \geq 0$$

Then the maximum value of the function $Z = 4x_1 + 3x_2$ is

(A) 20 (B) 25

(C) 15 (D) 30

20ú ³ì> A¡¹, x_1 &¤} x_2 W¡º¹à[Å ƒå[i¡ >ãìW¡¹ Åt¢¡P¡[º šè¹o A¡ì¹ –

$$3x_1 + x_2 \leq 15$$
$$3x_1 + 4x_2 \leq 24$$
$$x_1, x_2 \geq 0$$

t¡àÒìº $Z = 4x_1 + 3x_2$ "ìšÛ¡A¡[i¡¹ W¡¹³ ³à> Òì¤

(A) 20 (B) 25ø

(C) 15 (D) 30

21. How many 5-digit numbers divisible by 3 can be formed by using the digits 0,1,2,3,4 and 5, without repetition of digits?

(A) 148 (B) 224

(C) 336 (D) 216

21ú 0,1,2,3,4 * 5 Î}Jà¸P¡[º &A¡¤àì¹¹ ë¤[Å ¤¸¤Òà¹ >à A¡ì¹ 3 ‡à¹à [¤®¡à\Ş "ìS¡¹ A¡t¡P¡[º Î}Jà¸ Kk¡> A¡¹à ë™ìt¡ šàì¹?

(A) 148 ¡ (B) 224

(C) 336 (D) 216

22. If $[x]$ denotes the greatest integer less than or equal to x, then $\underset{x \to 0}{\mathrm{Lt}} \dfrac{x[x]}{\sin|x|} = ?$

(A) 0

(B) 1

(C) Does not exist

(D) –1

22ú ™[ƒ $[x]$ &A¡[i¡ Îì¤¢àZW¡ šèo¢Î}Jà¸ ë¤àc¡àÚx ™&¹ ë=ìA¡ ëáài¡ ¤à Î³à> $(\leq x)$ ÒÚ, t¡ì¤ $\underset{x \to 0}{\mathrm{Lt}} \dfrac{x[x]}{\sin|x|} = ?$

(A) 0

(B) 1

(C) "[Ñzâ« ë>Òü

(D) –1

23. If $\vec{a} = \hat{i} + \hat{j} + \hat{k}$, $\vec{b} = \hat{i}$ and $\vec{c} = c_1\hat{i} + 2\hat{j} + c_3\hat{k}$, then $\vec{a}, \vec{b}, \vec{c}$ will be coplanar for

(A) $c_1 = 1$ and $c_3 =$ any real number

(B) $c_1 = 2$ and $c_3 = 1$

(C) $c_1 =$ any real number and $c_3 = 1$

(D) $c_1 =$ any real number and $c_3 = 2$

23ú ™[ƒ $\vec{a} = \hat{i} + \hat{j} + \hat{k}$, $\vec{b} = \hat{i}$ &¤} $\vec{c} = c_1\hat{i} + 2\hat{j} + c_3\hat{k}$ ÒÚ, t¡àÒì° $\vec{a}, \vec{b}, \vec{c}$ &A¡Òü Î³t¡ì° "¤[Ñ,t¡ Òì¤ ™J>

(A) $c_1 = 1$ &¤} $c_3 =$ ë™ìA¡à> ¤àÑz¤ Î}Jà¸

(B) $c_1 = 2$ &¤} $c_3 = 1$

(C) $c_1 =$ ë™ìA¡à> ¤àÑz¤ Î}Jà¸ &¤} $c_3 = 1$

(D) $c_1 =$ ë™ìA¡à> ¤àÑz¤ Î}Jà¸ &¤} $c_3 = 2$

24. The ratio in which the yz plane divides the line joining the points (1,2,3) and (4,5,6) is

(A) –1:2
(B) –2:5
(C) 2:3
(D) –1:4

24ú (1,2,3) &¤} (4,5,6) [¤@ƒåKà³ã Î¹ºì¹JàìA¡ yz t¡º ë™ ">åšàìt¡ [¤®¡v¡û¡ A¡ì¹, t¡à Òº

(A) ¡–1:2
(B) –2:5
(C) 2:3
(D) –1:4

25. The equation of the plane passing through the line of intersection of the planes $2x+3y-5z+7=0$, $7x-4y+3z-11=0$ and parallel to the line joining the points (3,1,–2) and (1,–2,4) is

(A) $333x - 124y + 49z - 361 = 0$
(B) $124x - 333y + 49z + 361 = 0$
(C) $49x + 124y + 331z + 61 = 0$
(D) $330x + 120y + 40z + 361 = 0$

25ú $2x+3y-5z+7=0$ &¤} $7x-4y+3z-11=0$ Î³t¡º‡ìÚ¹ ëáƒ Î¹ºì¹JàKà³ã &¤} (3,1–2) * (1,–2,4) [¤@ƒå‡ìÚ¹ Î}ì™àKA¡à¹ã Î¹ºì¹Jà¹ ÎìU Î³à"z¹àº Î³t¡ìº¹ Î³ãA¡¹o Òº

(A) $333x - 124y + 49z - 361 = 0$
(B) $124x - 333y + 49z + 361 = 0$
(C) $49x + 124y + 331z + 61 = 0$
(D) $330x + 120y + 40z + 361 = 0$

26. Two positive numbers x and y are such that $x^2 + y^2 = a^2$, $(a > 0)$. Then the sum $x+y$ will be maximum when

(A) $x = \frac{a}{\sqrt{2}}, y = \frac{a}{\sqrt{2}}$
(B) $x = a, y = a$
(C) $x = a, y = \frac{a}{2}$
(D) $x = \frac{a}{\sqrt{2}}, y = a$

26ú x &¤} y ƒå[i¡ ‹>àâ«A¡ Î}Jà¸ &¤} $x^2 + y^2 = a^2$, $(a > 0)$ú x &¤} y &¹ ë™ ³àì>¹ \>¸ $x+y$ ¹à[Å[i¡¹ ³à> W¡¹³ Òì¤, t¡à Òº

(A) $x = \frac{a}{\sqrt{2}}, y = \frac{a}{\sqrt{2}}$
(B) $x = a, y = a$
(C) $x = a, y = \frac{a}{2}$
(D) $x = \frac{a}{\sqrt{2}}, y = a$

27. If the straight lines $ax+y+1=0$, $x+by+1=0$, $x+y+c=0$ (a, b, c are unequal and $\neq 1$) are concurrent, then $\frac{1}{1-a}+\frac{1}{1-b}+\frac{1}{1-c}=?$

(A) 0

(B) 2

(C) 1

(D) None of the above

27ú ™[ƒ $ax+y+1=0$, $x+by+1=0$, $x+y+c=0$ (a, b, c "Î³à> &¤} $\neq 1$) Î¹ºì¹Jà [t¡>[i¡ Î³[¤@ƒå ÒÚ, t¡ì¤ $\frac{1}{1-a}+\frac{1}{1-b}+\frac{1}{1-c}=?$

(A) 0

(B) 2

(C) 1

(D) I¡üšì¹¹ ëA¡à>[i¡Òü >Ú

28. The equations of tangents to the hyperbola $3x2-y^2=3$ parallel to the straight line $2x-y+4=0$ are

(A) $y=2x\pm 3$

(B) $y=2x\pm 1$

(C) $y=2x\pm 2$

(D) $y=2x\pm 5$

28ú $3x2-y^2=3$ š¹à¤õìv¡¹, $2x-y+4=0$ Î¹ºì¹Jà¹ Î[Òt¡ Î³à"z¹àº ÑšÅ¢A¡P¡[º¹ Î³ãA¡¹o Òì¤

(A) $y=2x\pm 3$

(B) $y=2x\pm 1$

(C) $y=2x\pm 2$

(D) $y=2x\pm 5$

29. Two variable straight lines $ax\cos\alpha+by\sin\alpha=a$ and $ax\sin\alpha-by\cos\alpha=b$, $(b>a>0)$ intersect at the point P, α being a parameter. Then the locus of P is an ellipse with eccentricity

(A) $\frac{\sqrt{b2\ -a2}}{a}$

(B) $\frac{\sqrt{b2\ -a2}}{b}$

(C) $\sqrt{\frac{b^2-a^2}{b^2+a^2}}$

(D) None of the above

29ú $ax\cos\alpha+by\sin\alpha=a$ &¤} $ax\sin\alpha-by\cos\alpha=b$, $(b>a>0)$ ƒå[i¡ š[¹¤t¢¡>Åã° Î̂¹ºì¹Jà¹ ëáƒ [¤@ƒå, ë™Jàì> α &A¡[i¡ šà¸¹à[³i¡à¹¡ú P-&¹ Îe¡à¹š=[i¡ Ò° &A¡[i¡ I¡üš¤õv¡ ™à¹ I¡ü;ìA¡@ƒøt¡à

(A) $\frac{\sqrt{b2\ -a2}}{a}$

(B) $\frac{\sqrt{b2\ -a2}}{b}$

(C) $\sqrt{\frac{b^2-a^2}{b^2+a^2}}$

(D) I¡üšì¹¹ ëA¡à>[i¡Òü >Ú

30. Let, A is a 3×3 matrix and B is its adjoint matrix. If $|B|=144$, then $|A|=$?

(A) ±2

(B) ±12

(C) ±8

(D) ±48

30ú ³ì> A¡¹, A &A¡[i¡ 3×3 ³à¸[i¡öG &¤} B Ò° A -&¹ Î}ºN¥ (adjoint) ³à¸[i¡öG ™[ƒ $|B|=144$ ÒÚ, t¡ì¤ $|A|=$?

(A) ±2

(B) ±12

(C) ±8

(D) ±48