Matrix Practice

CBDT

September 9, 2024

1

17

32

Contents

1	Matrix Multiplication	
2	Matrix Inverse	
3	Matrix Dete	erminant
1	Matrix	Multiplication
	estion1	$A = \begin{bmatrix} -10 & 9 \\ -6 & 4 \end{bmatrix} B = \begin{bmatrix} 3 & 7 \\ 6 & 9 \end{bmatrix} AB = ?$
qu	${\it estion 2}$	$A = \begin{bmatrix} -10 & 9 \\ -5 & -8 \end{bmatrix} B = \begin{bmatrix} 8 & 1 \\ 9 & 8 \end{bmatrix} AB = ?$
qu	estion3	$A = \begin{bmatrix} 1 & 0 \\ 5 & -2 \end{bmatrix} B = \begin{bmatrix} 3 & -8 \\ 5 & -2 \end{bmatrix} AB = ?$
qu	estion4	$A = \begin{bmatrix} 9 & -4 \\ 6 & 8 \end{bmatrix} B = \begin{bmatrix} -5 & -3 \\ 7 & -9 \end{bmatrix} AB = ?$
qu	estion5	$A = \begin{bmatrix} -2 & 9 \\ 5 & -4 \end{bmatrix} B = \begin{bmatrix} 6 & 9 \\ 7 & -2 \end{bmatrix} AB = ?$
qu	estion6	$A = \begin{bmatrix} -9 & -9 \\ 8 & -10 \end{bmatrix} B = \begin{bmatrix} 2 & -5 \\ -1 & -6 \end{bmatrix} AB = 5$
qu	estion7	$A = \begin{bmatrix} -6 & 7 \\ 5 & -7 \end{bmatrix} B = \begin{bmatrix} 1 & 4 \\ 2 & 9 \end{bmatrix} AB = ?$

$$A = \begin{bmatrix} 0 & -4 \\ 8 & -9 \end{bmatrix} \quad B = \begin{bmatrix} -6 & -5 \\ -2 & -2 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 9 & -4 \\ 0 & -2 \end{bmatrix} \quad B = \begin{bmatrix} 6 & 8 \\ -8 & -5 \end{bmatrix} \quad AB = ?$$

question10

$$A = \begin{bmatrix} 4 & 4 \\ -7 & 9 \end{bmatrix} \quad B = \begin{bmatrix} -8 & 2 \\ -2 & 2 \end{bmatrix} \quad AB = ?$$

question11

$$A = \begin{bmatrix} -5 & 2 \\ -9 & -9 \end{bmatrix} \quad B = \begin{bmatrix} 2 & 0 \\ 4 & -6 \end{bmatrix} \quad AB = ?$$

question12

$$A = \begin{bmatrix} -4 & -4 \\ 9 & 6 \end{bmatrix} \quad B = \begin{bmatrix} 8 & 6 \\ -7 & -1 \end{bmatrix} \quad AB = ?$$

question13

$$A = \begin{bmatrix} -3 & -5 \\ 9 & -2 \end{bmatrix} \quad B = \begin{bmatrix} -3 & -9 \\ 6 & -7 \end{bmatrix} \quad AB = ?$$

question14

$$A = \begin{bmatrix} 6 & -1 \\ 7 & 9 \end{bmatrix} \quad B = \begin{bmatrix} -1 & 8 \\ 2 & 1 \end{bmatrix} \quad AB = ?$$

question15

$$A = \begin{bmatrix} -4 & -3 \\ -10 & 4 \end{bmatrix} \quad B = \begin{bmatrix} 4 & 4 \\ -7 & 8 \end{bmatrix} \quad AB = ?$$

question16

$$A = \begin{bmatrix} -6 & 8 \\ -1 & 8 \end{bmatrix} \quad B = \begin{bmatrix} 4 & 4 \\ -7 & 0 \end{bmatrix} \quad AB = ?$$

question17

$$A = \begin{bmatrix} -1 & 5 \\ -2 & 0 \end{bmatrix} \quad B = \begin{bmatrix} -10 & -3 \\ -5 & 9 \end{bmatrix} \quad AB = ?$$

question18

$$A = \begin{bmatrix} 8 & -3 \\ 6 & 6 \end{bmatrix} \quad B = \begin{bmatrix} 3 & -3 \\ 2 & 6 \end{bmatrix} \quad AB = ?$$

question19

$$A = \begin{bmatrix} 7 & 9 \\ -6 & -6 \end{bmatrix} \quad B = \begin{bmatrix} 0 & -2 \\ -3 & 1 \end{bmatrix} \quad AB = ?$$

question20

$$A = \begin{bmatrix} -8 & 8 \\ -2 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 7 & 8 \\ -7 & 5 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -1 & 3 \\ 9 & -2 \end{bmatrix} \quad B = \begin{bmatrix} -6 & -4 \\ 4 & 2 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -7 & 3 \\ 0 & -6 \end{bmatrix} \quad B = \begin{bmatrix} -8 & -6 \\ 8 & -5 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 0 & -6 \\ 0 & 4 \end{bmatrix} \quad B = \begin{bmatrix} 2 & 8 \\ 2 & 0 \end{bmatrix} \quad AB = ?$$

question24

$$A = \begin{bmatrix} 7 & -8 \\ -3 & -1 \end{bmatrix} \quad B = \begin{bmatrix} 3 & -3 \\ 6 & -10 \end{bmatrix} \quad AB = ?$$

question25

$$A = \begin{bmatrix} -7 & 9 \\ -1 & 4 \end{bmatrix} \quad B = \begin{bmatrix} 8 & -3 \\ -4 & -8 \end{bmatrix} \quad AB = ?$$

question26

$$A = \begin{bmatrix} -3 & -4 \\ 6 & 2 \end{bmatrix} \quad B = \begin{bmatrix} -8 & 3 \\ -6 & 7 \end{bmatrix} \quad AB = ?$$

question27

$$A = \begin{bmatrix} 6 & 5 \\ 9 & 1 \end{bmatrix} \quad B = \begin{bmatrix} 1 & -2 \\ -6 & 2 \end{bmatrix} \quad AB = ?$$

question28

$$A = \begin{bmatrix} -9 & -10 \\ 5 & -6 \end{bmatrix} \quad B = \begin{bmatrix} 4 & 8 \\ 8 & 0 \end{bmatrix} \quad AB = ?$$

question29

$$A = \begin{bmatrix} -2 & -6 \\ 0 & -7 \end{bmatrix} \quad B = \begin{bmatrix} 4 & -6 \\ -9 & 2 \end{bmatrix} \quad AB = ?$$

question30

$$A = \begin{bmatrix} -7 & 1\\ 0 & 5 \end{bmatrix} \quad B = \begin{bmatrix} 5 & 8\\ 8 & -9 \end{bmatrix} \quad AB = ?$$

question31

$$A = \begin{bmatrix} -2 & -8 \\ -4 & 9 \end{bmatrix} \quad B = \begin{bmatrix} -7 & 3 \\ 7 & 9 \end{bmatrix} \quad AB = ?$$

question32

$$A = \begin{bmatrix} -7 & 0 \\ -1 & 8 \end{bmatrix} \quad B = \begin{bmatrix} -7 & 3 \\ -8 & -6 \end{bmatrix} \quad AB = ?$$

question33

$$A = \begin{bmatrix} 5 & 2 \\ -4 & 0 \end{bmatrix} \quad B = \begin{bmatrix} -8 & 2 \\ 1 & -2 \end{bmatrix} \quad AB = ?$$

question34

$$A = \begin{bmatrix} 4 & 8 \\ -5 & -6 \end{bmatrix} \quad B = \begin{bmatrix} 8 & 7 \\ 0 & 4 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 9 & -7 \\ 6 & -9 \end{bmatrix} \quad B = \begin{bmatrix} -10 & -3 \\ 9 & -5 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 7 & 9 \\ 8 & -4 \end{bmatrix} \quad B = \begin{bmatrix} 4 & 6 \\ 1 & 4 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -2 & 0 \\ -9 & -7 \end{bmatrix} \quad B = \begin{bmatrix} 2 & -8 \\ -4 & -1 \end{bmatrix} \quad AB = ?$$

question38

$$A = \begin{bmatrix} -7 & 7 \\ 2 & -7 \end{bmatrix} \quad B = \begin{bmatrix} 0 & 7 \\ -1 & -10 \end{bmatrix} \quad AB = ?$$

question39

$$A = \begin{bmatrix} 6 & -10 \\ -4 & 5 \end{bmatrix} \quad B = \begin{bmatrix} -7 & -9 \\ 9 & 0 \end{bmatrix} \quad AB = ?$$

question40

$$A = \begin{bmatrix} 0 & -2 \\ 3 & -1 \end{bmatrix} \quad B = \begin{bmatrix} -5 & -5 \\ 8 & 6 \end{bmatrix} \quad AB = ?$$

question41

$$A = \begin{bmatrix} -7 & 8 \\ -9 & -4 \end{bmatrix} \quad B = \begin{bmatrix} 6 & 2 \\ -8 & -7 \end{bmatrix} \quad AB = ?$$

question42

$$A = \begin{bmatrix} 6 & -10 \\ -3 & -5 \end{bmatrix} \quad B = \begin{bmatrix} -9 & 1 \\ -2 & 9 \end{bmatrix} \quad AB = ?$$

question43

$$A = \begin{bmatrix} -6 & 0 \\ -8 & 2 \end{bmatrix} \quad B = \begin{bmatrix} -1 & 6 \\ -2 & -6 \end{bmatrix} \quad AB = ?$$

question44

$$A = \begin{bmatrix} -1 & 0 \\ -1 & 4 \end{bmatrix} \quad B = \begin{bmatrix} 5 & 2 \\ 1 & 5 \end{bmatrix} \quad AB = ?$$

question45

$$A = \begin{bmatrix} -2 & -10 \\ 4 & 6 \end{bmatrix} \quad B = \begin{bmatrix} -10 & -9 \\ 0 & -5 \end{bmatrix} \quad AB = ?$$

question46

$$A = \begin{bmatrix} -7 & 6 \\ -9 & -4 \end{bmatrix} \quad B = \begin{bmatrix} 9 & 7 \\ -8 & 1 \end{bmatrix} \quad AB = ?$$

question47

$$A = \begin{bmatrix} 3 & -7 \\ 8 & -5 \end{bmatrix} \quad B = \begin{bmatrix} -5 & 4 \\ -4 & -2 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 4 & -7 \\ 0 & -2 \end{bmatrix} \quad B = \begin{bmatrix} 3 & 1 \\ 0 & 6 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -3 & 0 \\ 4 & 5 \end{bmatrix} \quad B = \begin{bmatrix} 3 & 8 \\ 7 & 1 \end{bmatrix} \quad AB = ?$$

question50

$$A = \begin{bmatrix} -9 & -9 \\ 2 & 3 \end{bmatrix} \quad B = \begin{bmatrix} -2 & 1 \\ -10 & -7 \end{bmatrix} \quad AB = ?$$

question51

$$A = \begin{bmatrix} 7 & -6 & 2 \\ 6 & 5 & -1 \\ -1 & -5 & 3 \end{bmatrix} \quad B = \begin{bmatrix} -6 & -6 & -6 \\ -8 & -9 & -1 \\ 0 & 5 & 0 \end{bmatrix} \quad AB = ?$$

question52

$$A = \begin{bmatrix} 1 & -9 & 1 \\ -10 & 9 & 6 \\ -7 & -5 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 3 & 7 & -2 \\ -10 & -9 & -2 \\ 7 & -3 & 4 \end{bmatrix} \quad AB = ?$$

question53

$$A = \begin{bmatrix} -1 & 7 & -4 \\ 6 & -5 & -5 \\ 2 & -7 & -3 \end{bmatrix} \quad B = \begin{bmatrix} 0 & 1 & -10 \\ -10 & 9 & 1 \\ -3 & 6 & -7 \end{bmatrix} \quad AB = ?$$

question54

$$A = \begin{bmatrix} -9 & -2 & 0 \\ 0 & 4 & -7 \\ -3 & 5 & -9 \end{bmatrix} \quad B = \begin{bmatrix} -2 & -7 & 4 \\ -8 & -5 & 2 \\ 5 & -2 & 1 \end{bmatrix} \quad AB = ?$$

question55

$$A = \begin{bmatrix} -8 & -3 & -7 \\ 8 & 1 & -3 \\ 8 & -4 & -3 \end{bmatrix} \quad B = \begin{bmatrix} -4 & 2 & 0 \\ 1 & 1 & 5 \\ 7 & 9 & 1 \end{bmatrix} \quad AB = ?$$

question56

$$A = \begin{bmatrix} -3 & 6 & -10 \\ -1 & 7 & -10 \\ -1 & 8 & -7 \end{bmatrix} \quad B = \begin{bmatrix} 2 & -4 & 2 \\ -2 & -8 & 8 \\ 4 & 2 & -3 \end{bmatrix} \quad AB = ?$$

 ${\bf question 57}$

$$A = \begin{bmatrix} 0 & -1 & -6 \\ 1 & -8 & 8 \\ 0 & 1 & -10 \end{bmatrix} \quad B = \begin{bmatrix} 6 & -5 & 9 \\ 2 & 8 & -9 \\ 1 & -7 & -4 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -8 & 9 & -5 \\ 1 & 4 & 9 \\ 8 & 0 & -6 \end{bmatrix} \quad B = \begin{bmatrix} 8 & 7 & 3 \\ -8 & 5 & -6 \\ -3 & -4 & -3 \end{bmatrix} \quad AB = ?$$

question59

$$A = \begin{bmatrix} -4 & -10 & 6 \\ -4 & -4 & -1 \\ 6 & 9 & -4 \end{bmatrix} \quad B = \begin{bmatrix} 7 & 1 & -3 \\ 0 & -7 & 9 \\ -4 & -1 & 0 \end{bmatrix} \quad AB = ?$$

question60

$$A = \begin{bmatrix} 6 & -8 & 3 \\ 8 & 2 & -8 \\ -4 & -4 & 9 \end{bmatrix} \quad B = \begin{bmatrix} -6 & -6 & -2 \\ -6 & 5 & -4 \\ -3 & 3 & -8 \end{bmatrix} \quad AB = ?$$

question61

$$A = \begin{bmatrix} -10 & -10 & 4 \\ 9 & 8 & -8 \\ -7 & 6 & -3 \end{bmatrix} \quad B = \begin{bmatrix} 7 & 8 & 3 \\ -3 & -6 & -1 \\ -1 & 5 & 3 \end{bmatrix} \quad AB = ?$$

question62

$$A = \begin{bmatrix} -7 & 3 & -7 \\ -9 & 8 & -9 \\ -3 & 1 & -6 \end{bmatrix} \quad B = \begin{bmatrix} 0 & 7 & 5 \\ -6 & -2 & 8 \\ 6 & 6 & -1 \end{bmatrix} \quad AB = ?$$

question63

$$A = \begin{bmatrix} -9 & 2 & -2 \\ -8 & -10 & -3 \\ 3 & -5 & -3 \end{bmatrix} \quad B = \begin{bmatrix} 6 & 3 & -5 \\ 2 & -2 & 1 \\ -9 & -3 & -9 \end{bmatrix} \quad AB = ?$$

question64

$$A = \begin{bmatrix} 7 & 7 & 9 \\ 9 & 1 & 3 \\ -9 & -9 & -8 \end{bmatrix} \quad B = \begin{bmatrix} 5 & 4 & 6 \\ 8 & 9 & 7 \\ 6 & 5 & 3 \end{bmatrix} \quad AB = ?$$

question65

$$A = \begin{bmatrix} -2 & -1 & 5 \\ -6 & 9 & 0 \\ -5 & 1 & -8 \end{bmatrix} \quad B = \begin{bmatrix} 6 & -8 & 3 \\ -3 & 5 & 5 \\ -5 & 0 & -5 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -4 & -7 & -1 \\ -1 & 9 & 5 \\ -9 & 8 & -9 \end{bmatrix} \quad B = \begin{bmatrix} -2 & -8 & -6 \\ 5 & -8 & -4 \\ 8 & -7 & -6 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -1 & 5 & 9 \\ -7 & -1 & -5 \\ -6 & -7 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 0 & 8 & 7 \\ 3 & -8 & 6 \\ 4 & -9 & 8 \end{bmatrix} \quad AB = ?$$

question68

$$A = \begin{bmatrix} -4 & 2 & -7 \\ -2 & -8 & 5 \\ 3 & -2 & 6 \end{bmatrix} \quad B = \begin{bmatrix} 6 & 6 & 3 \\ -3 & -6 & 5 \\ 1 & -7 & -10 \end{bmatrix} \quad AB = ?$$

question69

$$A = \begin{bmatrix} 5 & 1 & -7 \\ -3 & -7 & 9 \\ -8 & 6 & -3 \end{bmatrix} \quad B = \begin{bmatrix} -4 & -9 & -9 \\ -6 & 2 & -3 \\ -7 & -4 & 3 \end{bmatrix} \quad AB = ?$$

question70

$$A = \begin{bmatrix} -9 & -1 & 4 \\ -6 & -1 & 1 \\ -3 & 1 & 6 \end{bmatrix} \quad B = \begin{bmatrix} 7 & -5 & 5 \\ 8 & 4 & -7 \\ -5 & 2 & 1 \end{bmatrix} \quad AB = ?$$

question71

$$A = \begin{bmatrix} 7 & 1 & 2 \\ -9 & 3 & -9 \\ 9 & -3 & 4 \end{bmatrix} \quad B = \begin{bmatrix} 7 & -2 & -8 \\ -7 & -10 & -6 \\ -4 & 0 & -9 \end{bmatrix} \quad AB = ?$$

question72

$$A = \begin{bmatrix} 0 & -8 & -10 \\ 2 & 3 & 8 \\ -6 & 2 & -1 \end{bmatrix} \quad B = \begin{bmatrix} 1 & -9 & -7 \\ 8 & 3 & 5 \\ 8 & 1 & 0 \end{bmatrix} \quad AB = ?$$

question73

$$A = \begin{bmatrix} 4 & 8 & -7 \\ -8 & -6 & -10 \\ 5 & 2 & 0 \end{bmatrix} \quad B = \begin{bmatrix} 4 & 1 & -2 \\ -6 & 1 & -10 \\ 9 & 8 & 8 \end{bmatrix} \quad AB = ?$$

question74

$$A = \begin{bmatrix} 0 & -3 & 5 \\ -10 & -5 & 4 \\ -3 & 2 & -7 \end{bmatrix} \quad B = \begin{bmatrix} 2 & -6 & 9 \\ -1 & 9 & 7 \\ -2 & 8 & 2 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -9 & 0 & -1 \\ -3 & 3 & -5 \\ 1 & -9 & -9 \end{bmatrix} \quad B = \begin{bmatrix} 4 & 1 & 2 \\ -5 & 5 & 1 \\ -5 & -8 & -8 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -5 & -1 & -6 \\ 7 & 4 & 6 \\ -4 & -2 & 1 \end{bmatrix} \quad B = \begin{bmatrix} 1 & -1 & 0 \\ -6 & -6 & -7 \\ 2 & -2 & 2 \end{bmatrix} \quad AB = ?$$

question77

$$A = \begin{bmatrix} -2 & 5 & 1 \\ 1 & 9 & 5 \\ -9 & 6 & 1 \end{bmatrix} \quad B = \begin{bmatrix} 3 & 0 & -7 \\ 8 & -6 & -7 \\ 9 & 6 & 3 \end{bmatrix} \quad AB = ?$$

question78

$$A = \begin{bmatrix} 5 & 5 & 5 \\ -2 & -10 & 4 \\ 5 & -3 & 9 \end{bmatrix} \quad B = \begin{bmatrix} 8 & -7 & 7 \\ 8 & 2 & -5 \\ 5 & -6 & 4 \end{bmatrix} \quad AB = ?$$

question79

$$A = \begin{bmatrix} 6 & -2 & 3 \\ -2 & 1 & -10 \\ 7 & -10 & 4 \end{bmatrix} \quad B = \begin{bmatrix} -7 & -6 & -6 \\ 6 & -5 & -3 \\ 2 & 8 & -3 \end{bmatrix} \quad AB = ?$$

question80

$$A = \begin{bmatrix} 8 & 1 & 2 \\ 9 & 5 & 9 \\ 0 & -1 & 4 \end{bmatrix} \quad B = \begin{bmatrix} 7 & 4 & 9 \\ -3 & 7 & -7 \\ -10 & -2 & 5 \end{bmatrix} \quad AB = ?$$

question81

$$A = \begin{bmatrix} 9 & -3 & -8 \\ 8 & 3 & -2 \\ 0 & -6 & 4 \end{bmatrix} \quad B = \begin{bmatrix} 6 & -2 & -9 \\ -2 & 3 & -2 \\ 4 & -7 & 7 \end{bmatrix} \quad AB = ?$$

question82

$$A = \begin{bmatrix} -2 & 0 & -1 \\ 9 & 4 & 2 \\ 5 & -6 & -4 \end{bmatrix} \quad B = \begin{bmatrix} -8 & 5 & -10 \\ 0 & -8 & 2 \\ -8 & -8 & 0 \end{bmatrix} \quad AB = ?$$

question83

$$A = \begin{bmatrix} -2 & -1 & 5 \\ 7 & -3 & 9 \\ 0 & -10 & -9 \end{bmatrix} \quad B = \begin{bmatrix} -10 & -7 & -1 \\ -2 & 7 & 2 \\ -1 & -10 & -5 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 5 & 9 & -8 \\ 9 & 4 & 0 \\ 7 & -6 & -9 \end{bmatrix} \quad B = \begin{bmatrix} 6 & -1 & 7 \\ 3 & -10 & -6 \\ -1 & 9 & 3 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 3 & 9 & 4 \\ 2 & -9 & -1 \\ -4 & 9 & 4 \end{bmatrix} \quad B = \begin{bmatrix} -8 & -6 & 7 \\ -1 & -7 & 6 \\ 2 & -10 & -5 \end{bmatrix} \quad AB = ?$$

question86

$$A = \begin{bmatrix} -5 & -3 & -3 \\ -2 & 6 & 8 \\ 6 & 4 & -7 \end{bmatrix} \quad B = \begin{bmatrix} -4 & 6 & 1 \\ 7 & 1 & -5 \\ 6 & -10 & -9 \end{bmatrix} \quad AB = ?$$

question87

$$A = \begin{bmatrix} -1 & -10 & -3 \\ 2 & 1 & 9 \\ 4 & -6 & -1 \end{bmatrix} \quad B = \begin{bmatrix} 0 & 5 & 8 \\ -4 & 5 & 5 \\ 7 & -2 & -4 \end{bmatrix} \quad AB = ?$$

question88

$$A = \begin{bmatrix} -10 & -8 & -8 \\ 9 & -1 & -6 \\ -7 & -4 & 9 \end{bmatrix} \quad B = \begin{bmatrix} -1 & 3 & -2 \\ 2 & 8 & -2 \\ 0 & 3 & 2 \end{bmatrix} \quad AB = ?$$

question89

$$A = \begin{bmatrix} -4 & -3 & -8 \\ -10 & -1 & -4 \\ 4 & 2 & -10 \end{bmatrix} \quad B = \begin{bmatrix} 3 & 1 & -6 \\ 4 & 3 & -10 \\ 5 & 3 & -4 \end{bmatrix} \quad AB = ?$$

question90

$$A = \begin{bmatrix} 0 & 4 & -6 \\ 8 & -3 & 1 \\ -8 & 3 & -4 \end{bmatrix} \quad B = \begin{bmatrix} 5 & 6 & -7 \\ -4 & -3 & 0 \\ -5 & 0 & -2 \end{bmatrix} \quad AB = ?$$

question91

$$A = \begin{bmatrix} 7 & 6 & -2 \\ -2 & -6 & 0 \\ -3 & -1 & -2 \end{bmatrix} \quad B = \begin{bmatrix} 1 & -10 & 0 \\ 1 & 0 & -1 \\ -7 & 3 & 6 \end{bmatrix} \quad AB = ?$$

question92

$$A = \begin{bmatrix} 5 & 5 & 2 \\ 2 & 7 & -5 \\ 3 & -1 & 8 \end{bmatrix} \quad B = \begin{bmatrix} 2 & -7 & -7 \\ -9 & -3 & -5 \\ 9 & 1 & -8 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 6 & -1 & 1 \\ 2 & -7 & -3 \\ -1 & 7 & -3 \end{bmatrix} \quad B = \begin{bmatrix} -9 & 6 & -1 \\ 4 & 0 & 1 \\ 7 & -7 & -8 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -9 & 8 & -7 \\ -10 & 9 & -2 \\ -9 & 9 & 7 \end{bmatrix} \quad B = \begin{bmatrix} -10 & -4 & -5 \\ -2 & 0 & 8 \\ 2 & -3 & -4 \end{bmatrix} \quad AB = ?$$

question95

$$A = \begin{bmatrix} -5 & 7 & 6 \\ 8 & -2 & 8 \\ -1 & 5 & 6 \end{bmatrix} \quad B = \begin{bmatrix} 3 & -7 & -7 \\ -8 & 8 & 5 \\ 8 & 9 & -8 \end{bmatrix} \quad AB = ?$$

question96

$$A = \begin{bmatrix} -5 & -4 & 4 \\ 9 & 9 & 0 \\ -6 & -10 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 5 & -4 & 8 \\ -7 & 0 & -1 \\ 3 & -5 & 4 \end{bmatrix} \quad AB = ?$$

question97

$$A = \begin{bmatrix} -8 & -8 & 1\\ 4 & -3 & -4\\ -2 & -9 & 7 \end{bmatrix} \quad B = \begin{bmatrix} 9 & 4 & -7\\ 6 & -2 & -3\\ -2 & 4 & -3 \end{bmatrix} \quad AB = ?$$

question98

$$A = \begin{bmatrix} -5 & 3 & -7 \\ -10 & -3 & 0 \\ 8 & -8 & 3 \end{bmatrix} \quad B = \begin{bmatrix} -9 & -6 & 7 \\ 4 & 7 & 7 \\ -2 & -5 & 9 \end{bmatrix} \quad AB = ?$$

question99

$$A = \begin{bmatrix} -3 & -2 & -3 \\ -2 & 6 & 2 \\ 9 & 6 & 4 \end{bmatrix} \quad B = \begin{bmatrix} 1 & -9 & -7 \\ 2 & -2 & -5 \\ -3 & 1 & -5 \end{bmatrix} \quad AB = ?$$

question100

$$A = \begin{bmatrix} 9 & -10 & -7 \\ 7 & -2 & -7 \\ -2 & 5 & -9 \end{bmatrix} \quad B = \begin{bmatrix} -6 & 3 & 8 \\ -6 & 7 & 2 \\ 5 & 5 & 5 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -5 & 0 & -4 & 4 \\ 2 & -3 & -1 & 8 \\ 9 & 4 & 6 & -1 \\ -6 & 1 & 6 & -5 \end{bmatrix} \quad B = \begin{bmatrix} 5 & -2 & -1 & -8 \\ -10 & 4 & -8 & -6 \\ 2 & 9 & -2 & -4 \\ -8 & -7 & -5 & 0 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -8 & -2 & -6 & -1 \\ -5 & -2 & 8 & -6 \\ -8 & 5 & 2 & 4 \\ -2 & -5 & 8 & -10 \end{bmatrix} \quad B = \begin{bmatrix} 8 & 3 & -3 & -9 \\ -9 & -9 & 3 & -7 \\ -3 & -5 & 8 & -2 \\ 5 & 5 & -10 & -2 \end{bmatrix} \quad AB = ?$$

question103

$$A = \begin{bmatrix} -10 & -1 & 0 & -6 \\ 0 & -1 & 3 & -1 \\ -6 & -7 & -1 & -3 \\ 5 & 2 & -4 & -4 \end{bmatrix} \quad B = \begin{bmatrix} -2 & -7 & 3 & -7 \\ -9 & 1 & -9 & -3 \\ 2 & -1 & -1 & 6 \\ 5 & -1 & 0 & -5 \end{bmatrix} \quad AB = ?$$

question104

$$A = \begin{bmatrix} 7 & -9 & 2 & 2 \\ -9 & -8 & -1 & -9 \\ 4 & -1 & 3 & 4 \\ -1 & 5 & 8 & -5 \end{bmatrix} \quad B = \begin{bmatrix} 2 & 7 & -10 & 6 \\ -2 & -10 & -9 & 2 \\ 8 & 9 & 6 & -8 \\ -9 & 8 & 2 & 9 \end{bmatrix} \quad AB = ?$$

question105

$$A = \begin{bmatrix} 0 & -1 & -3 & -7 \\ 2 & -3 & -3 & 5 \\ -2 & 1 & -9 & -5 \\ 6 & 0 & -10 & -3 \end{bmatrix} \quad B = \begin{bmatrix} -4 & -7 & 0 & -2 \\ -6 & 1 & 6 & -9 \\ -9 & -7 & -3 & -4 \\ 2 & 4 & 2 & -6 \end{bmatrix} \quad AB = ?$$

question106

$$A = \begin{bmatrix} -8 & 2 & 2 & -9 \\ -3 & -9 & 2 & -9 \\ -7 & -4 & -7 & -5 \\ -8 & 3 & -7 & 0 \end{bmatrix} \quad B = \begin{bmatrix} -10 & -3 & 7 & 2 \\ 2 & -6 & -9 & -9 \\ 6 & -2 & -6 & 0 \\ -7 & 7 & 5 & -7 \end{bmatrix} \quad AB = ?$$

question107

$$A = \begin{bmatrix} 7 & 0 & -6 & 3 \\ -7 & 7 & -3 & -4 \\ -7 & -1 & 8 & 0 \\ 4 & 9 & -2 & -6 \end{bmatrix} \quad B = \begin{bmatrix} 1 & 6 & -4 & 9 \\ -3 & -3 & 9 & -1 \\ -8 & 4 & 1 & 0 \\ -2 & 1 & 0 & -2 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 9 & -1 & 9 & -3 \\ -8 & 0 & -3 & -8 \\ -6 & -10 & -9 & -8 \\ -10 & -7 & 6 & 9 \end{bmatrix} \quad B = \begin{bmatrix} 7 & -6 & -5 & 3 \\ 8 & -6 & 8 & -6 \\ 4 & 2 & -1 & -6 \\ -2 & -8 & 8 & 8 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 0 & 6 & -2 & -7 \\ -8 & 1 & -5 & 3 \\ -4 & -3 & 7 & 5 \\ -1 & 6 & -9 & 8 \end{bmatrix} \quad B = \begin{bmatrix} 0 & 6 & 0 & 2 \\ -5 & -3 & -5 & 2 \\ 0 & 4 & -1 & -8 \\ -3 & 0 & -2 & -5 \end{bmatrix} \quad AB = ?$$

question110

$$A = \begin{bmatrix} -8 & 3 & 1 & 7 \\ 2 & -2 & 2 & -10 \\ 2 & -7 & 0 & -1 \\ -3 & 6 & -4 & 8 \end{bmatrix} \quad B = \begin{bmatrix} -4 & 7 & 0 & 9 \\ 7 & -10 & -6 & -5 \\ -7 & 0 & 9 & 9 \\ 0 & -3 & -9 & 8 \end{bmatrix} \quad AB = ?$$

question111

$$A = \begin{bmatrix} 3 & -2 & 3 & -7 \\ 0 & -7 & -10 & 0 \\ 0 & -4 & -9 & -6 \\ 3 & -8 & -2 & -8 \end{bmatrix} \quad B = \begin{bmatrix} 6 & 8 & 2 & 1 \\ 9 & 2 & -7 & 9 \\ 8 & -9 & 5 & -7 \\ -7 & 7 & 9 & 6 \end{bmatrix} \quad AB = ?$$

question112

$$A = \begin{bmatrix} 9 & 5 & 1 & 5 \\ -4 & -1 & -8 & 8 \\ 5 & 0 & 6 & 6 \\ 1 & -4 & 1 & 6 \end{bmatrix} \quad B = \begin{bmatrix} -8 & 9 & -10 & 2 \\ 1 & 0 & -8 & -3 \\ -1 & -4 & 2 & 0 \\ -6 & 9 & -7 & -3 \end{bmatrix} \quad AB = ?$$

question113

$$A = \begin{bmatrix} 2 & -8 & -3 & -8 \\ 4 & 3 & -1 & -5 \\ 5 & 4 & -6 & 5 \\ -4 & 4 & 7 & -3 \end{bmatrix} \quad B = \begin{bmatrix} 3 & 4 & 1 & 0 \\ -2 & -6 & -10 & -5 \\ 3 & 7 & 4 & 6 \\ -2 & -6 & 0 & 3 \end{bmatrix} \quad AB = ?$$

question114

$$A = \begin{bmatrix} -10 & -4 & -7 & 1 \\ -1 & 9 & -1 & -1 \\ 6 & 1 & 1 & -2 \\ -7 & -3 & -10 & 7 \end{bmatrix} \quad B = \begin{bmatrix} -4 & -2 & 0 & -3 \\ 2 & 2 & 1 & -4 \\ -3 & -6 & 0 & 3 \\ -2 & 0 & -1 & -4 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -1 & 2 & 2 & 1 \\ -5 & 4 & 0 & -10 \\ -4 & 2 & -3 & 9 \\ -5 & -6 & -8 & -4 \end{bmatrix} \quad B = \begin{bmatrix} -5 & 5 & 4 & 1 \\ 3 & 5 & -4 & -10 \\ -7 & -5 & 0 & -7 \\ -3 & -9 & -1 & -6 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -3 & -4 & 5 & -5 \\ -3 & -3 & -7 & -1 \\ 1 & -3 & 4 & 0 \\ 4 & -6 & -1 & 7 \end{bmatrix} \quad B = \begin{bmatrix} 8 & 5 & -3 & 7 \\ -8 & 5 & -2 & 6 \\ -8 & 7 & 6 & 2 \\ -3 & 7 & -6 & -2 \end{bmatrix} \quad AB = ?$$

question117

$$A = \begin{bmatrix} -1 & -3 & 2 & 4 \\ -8 & 3 & 4 & 1 \\ 5 & -1 & 3 & 7 \\ -3 & -9 & -9 & 6 \end{bmatrix} \quad B = \begin{bmatrix} -1 & -7 & -3 & 9 \\ -7 & 7 & -10 & -3 \\ 5 & 5 & -8 & 7 \\ -4 & 5 & -6 & -6 \end{bmatrix} \quad AB = ?$$

question118

$$A = \begin{bmatrix} 5 & 9 & 2 & -5 \\ -8 & -6 & 9 & 5 \\ 1 & 5 & 9 & 1 \\ -3 & 5 & -5 & 3 \end{bmatrix} \quad B = \begin{bmatrix} -10 & -2 & -5 & 9 \\ -3 & -3 & 7 & -7 \\ -4 & 6 & -1 & -4 \\ -1 & 7 & -8 & 1 \end{bmatrix} \quad AB = ?$$

question119

$$A = \begin{bmatrix} -4 & -8 & 5 & -6 \\ -7 & 3 & -7 & -8 \\ -9 & 2 & 7 & 5 \\ -10 & -1 & 6 & 4 \end{bmatrix} \quad B = \begin{bmatrix} -6 & 5 & -8 & -4 \\ -7 & -10 & -5 & 6 \\ 6 & 2 & 0 & -6 \\ 5 & 1 & -6 & 6 \end{bmatrix} \quad AB = ?$$

question120

$$A = \begin{bmatrix} -5 & -8 & 8 & -2 \\ 3 & -9 & 3 & 0 \\ 5 & 4 & 9 & 7 \\ 6 & 0 & 6 & 7 \end{bmatrix} \quad B = \begin{bmatrix} -5 & -8 & -3 & -4 \\ 0 & -6 & 6 & 5 \\ 9 & 1 & -2 & 0 \\ 0 & 6 & -8 & -3 \end{bmatrix} \quad AB = ?$$

question121

$$A = \begin{bmatrix} 8 & -6 & 1 & 1 \\ -8 & 4 & 4 & 8 \\ 7 & 6 & -2 & -7 \\ -2 & -8 & 8 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 6 & -7 & 8 & -2 \\ 2 & -3 & 5 & 8 \\ -6 & -10 & 5 & -9 \\ -1 & 2 & 7 & 1 \end{bmatrix} \quad AB = ?$$

${\bf question 122}$

$$A = \begin{bmatrix} -6 & -10 & -2 & -5 \\ 8 & 3 & 4 & 5 \\ -2 & 0 & 7 & -10 \\ 4 & 4 & 1 & -5 \end{bmatrix} \quad B = \begin{bmatrix} -3 & -8 & 6 & -10 \\ -3 & 9 & -2 & -8 \\ -6 & 9 & 9 & -2 \\ 7 & -1 & 7 & -7 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 1 & -5 & -3 & -4 \\ -4 & 0 & -4 & -2 \\ -2 & 2 & -8 & 5 \\ 5 & -2 & 0 & 5 \end{bmatrix} \quad B = \begin{bmatrix} 8 & 5 & 8 & 8 \\ 7 & 1 & 7 & 9 \\ 4 & -10 & -8 & 0 \\ -10 & -4 & 6 & -6 \end{bmatrix} \quad AB = ?$$

question124

$$A = \begin{bmatrix} -7 & 9 & -1 & -10 \\ 2 & -5 & 8 & 1 \\ 8 & 7 & -8 & -9 \\ 5 & -6 & -9 & -6 \end{bmatrix} \quad B = \begin{bmatrix} -7 & 7 & -8 & -3 \\ -1 & -2 & 7 & -6 \\ -6 & -2 & -6 & -5 \\ -8 & 0 & -7 & 2 \end{bmatrix} \quad AB = ?$$

question125

$$A = \begin{bmatrix} -5 & 0 & -4 & 3 \\ 5 & 1 & 3 & -5 \\ 3 & 6 & -4 & -6 \\ -8 & 4 & -3 & 0 \end{bmatrix} \quad B = \begin{bmatrix} -7 & -3 & -7 & -6 \\ -7 & -4 & -4 & 0 \\ 8 & 3 & -1 & -3 \\ 6 & -3 & 2 & 2 \end{bmatrix} \quad AB = ?$$

question126

$$A = \begin{bmatrix} -3 & -6 & -5 & -8 \\ -2 & 3 & 9 & 7 \\ -2 & -3 & 8 & 2 \\ 5 & -5 & -3 & 5 \end{bmatrix} \quad B = \begin{bmatrix} -9 & 3 & 4 & 2 \\ -7 & 9 & 8 & -4 \\ 6 & -7 & -9 & 9 \\ -2 & 9 & 6 & 4 \end{bmatrix} \quad AB = ?$$

question127

$$A = \begin{bmatrix} 4 & 0 & -9 & 0 \\ 2 & 6 & -10 & 8 \\ -2 & -7 & -7 & 0 \\ -10 & -2 & -7 & 5 \end{bmatrix} \quad B = \begin{bmatrix} -4 & -6 & 6 & 1 \\ 6 & 0 & -3 & 8 \\ 9 & 9 & -9 & -2 \\ 4 & -6 & 0 & -9 \end{bmatrix} \quad AB = ?$$

question 128

$$A = \begin{bmatrix} -3 & -9 & 8 & 6 \\ -7 & -7 & -4 & -4 \\ 4 & -10 & -2 & -3 \\ -10 & 6 & -3 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 5 & -6 & -2 & 1 \\ 2 & -7 & 7 & 6 \\ 9 & -6 & 5 & -5 \\ -3 & -3 & 2 & 8 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -5 & -4 & 7 & 6 \\ -9 & 4 & 4 & -2 \\ -9 & 2 & 1 & -1 \\ -1 & -6 & 8 & 0 \end{bmatrix} \quad B = \begin{bmatrix} 6 & 3 & 6 & 0 \\ 4 & 2 & 5 & -2 \\ -5 & 7 & 5 & 1 \\ -6 & -9 & 7 & -3 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 9 & 1 & -7 & -8 \\ 4 & -6 & -10 & -10 \\ -6 & 8 & -3 & -5 \\ -2 & -4 & 5 & 0 \end{bmatrix} \quad B = \begin{bmatrix} -5 & -1 & -5 & -4 \\ 9 & 2 & -8 & 0 \\ -10 & -1 & -10 & 3 \\ 2 & -8 & 2 & -4 \end{bmatrix} \quad AB = ?$$

question131

$$A = \begin{bmatrix} 9 & -1 & -10 & -1 \\ 1 & -10 & 9 & 7 \\ 5 & -9 & -8 & 3 \\ -6 & 0 & 2 & 5 \end{bmatrix} \quad B = \begin{bmatrix} 9 & 1 & -10 & 0 \\ 5 & 7 & 7 & 2 \\ -10 & 9 & -7 & -1 \\ 3 & 7 & 9 & 7 \end{bmatrix} \quad AB = ?$$

question132

$$A = \begin{bmatrix} -2 & -2 & -7 & -1 \\ 9 & -2 & 2 & 2 \\ -5 & 9 & -4 & 6 \\ 1 & -5 & -5 & -5 \end{bmatrix} \quad B = \begin{bmatrix} 4 & -5 & 5 & -10 \\ -9 & -10 & 0 & 4 \\ 0 & 0 & 9 & -4 \\ 5 & 5 & -6 & 7 \end{bmatrix} \quad AB = ?$$

question133

$$A = \begin{bmatrix} 3 & -8 & -5 & -10 \\ -8 & -8 & -9 & 8 \\ -7 & 4 & 3 & 4 \\ -1 & -5 & -4 & -8 \end{bmatrix} \quad B = \begin{bmatrix} -4 & 0 & -3 & 3 \\ -5 & -10 & 8 & -8 \\ -4 & 2 & -3 & 0 \\ 2 & 2 & 9 & 7 \end{bmatrix} \quad AB = ?$$

question134

$$A = \begin{bmatrix} -5 & 4 & 9 & -6 \\ 7 & -5 & -10 & -7 \\ 9 & 2 & -3 & 5 \\ 2 & -9 & -8 & -7 \end{bmatrix} \quad B = \begin{bmatrix} 3 & 3 & -5 & -1 \\ 0 & -7 & 8 & 8 \\ 8 & 6 & -2 & -4 \\ -4 & 5 & -2 & 0 \end{bmatrix} \quad AB = ?$$

question135

$$A = \begin{bmatrix} -6 & -3 & 7 & 0 \\ -10 & 0 & -4 & 3 \\ -3 & -9 & 1 & -2 \\ 2 & 3 & -3 & 9 \end{bmatrix} \quad B = \begin{bmatrix} 1 & 8 & -8 & -9 \\ -8 & -1 & 4 & -10 \\ 7 & -7 & -4 & -1 \\ 6 & -6 & -6 & -9 \end{bmatrix} \quad AB = ?$$

${\bf question 136}$

$$A = \begin{bmatrix} 2 & 4 & -10 & 0 \\ -2 & -10 & 6 & 7 \\ 4 & -5 & -8 & -7 \\ -6 & 0 & 1 & 9 \end{bmatrix} \quad B = \begin{bmatrix} 2 & 3 & -6 & 9 \\ -5 & -1 & -1 & -1 \\ -4 & -10 & -7 & 9 \\ -2 & 3 & 0 & -2 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -2 & 7 & 3 & -2 \\ -1 & 0 & 8 & 3 \\ -6 & -6 & 4 & -8 \\ -4 & -9 & 6 & -9 \end{bmatrix} \quad B = \begin{bmatrix} -7 & -7 & 8 & -6 \\ 9 & -4 & 7 & 2 \\ -3 & 3 & -7 & -9 \\ -8 & 1 & -4 & 2 \end{bmatrix} \quad AB = ?$$

question138

$$A = \begin{bmatrix} -5 & 9 & -2 & -6 \\ 9 & 0 & 1 & 8 \\ 4 & 7 & -2 & -2 \\ -3 & -8 & 1 & 4 \end{bmatrix} \quad B = \begin{bmatrix} -6 & 6 & -8 & 6 \\ -3 & 4 & -10 & -2 \\ 3 & -2 & -2 & 2 \\ -9 & 4 & 8 & -9 \end{bmatrix} \quad AB = ?$$

question139

$$A = \begin{bmatrix} 3 & -6 & -8 & 6 \\ 1 & -7 & 0 & 5 \\ -8 & 2 & -2 & -1 \\ -7 & -2 & 2 & 5 \end{bmatrix} \quad B = \begin{bmatrix} 4 & 4 & -9 & 0 \\ -1 & -7 & 9 & -5 \\ 7 & 8 & 2 & -7 \\ 7 & 0 & -10 & 7 \end{bmatrix} \quad AB = ?$$

question140

$$A = \begin{bmatrix} -2 & 3 & -7 & 9 \\ 2 & -3 & 0 & 3 \\ 1 & 0 & 3 & 0 \\ -9 & -7 & -9 & 5 \end{bmatrix} \quad B = \begin{bmatrix} -7 & 5 & -4 & -10 \\ 5 & 5 & -10 & -1 \\ 0 & 9 & -3 & -9 \\ -2 & -4 & -8 & -6 \end{bmatrix} \quad AB = ?$$

question141

$$A = \begin{bmatrix} 5 & 9 & -7 & 1 \\ 0 & 5 & -3 & 9 \\ -1 & 9 & -7 & -3 \\ 1 & 5 & 4 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 9 & 0 & 0 & 8 \\ 1 & 2 & -5 & -6 \\ -3 & -9 & -4 & -9 \\ -10 & -2 & -9 & -7 \end{bmatrix} \quad AB = ?$$

question142

$$A = \begin{bmatrix} -7 & 1 & -7 & -7 \\ -7 & 2 & -9 & -5 \\ 4 & 8 & -1 & 8 \\ -1 & -3 & -2 & -9 \end{bmatrix} \quad B = \begin{bmatrix} -2 & -7 & 7 & 5 \\ -10 & -4 & 6 & -9 \\ 0 & 8 & 1 & -5 \\ 8 & 0 & 0 & 3 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 3 & 1 & -8 & 1 \\ -1 & -1 & 2 & 9 \\ -6 & 4 & 0 & -8 \\ 9 & -9 & 9 & -5 \end{bmatrix} \quad B = \begin{bmatrix} 1 & 8 & -4 & 0 \\ 0 & 9 & 3 & 3 \\ 2 & 7 & -5 & 1 \\ 2 & -10 & 7 & 0 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} -3 & 7 & -1 & 0 \\ -6 & -7 & -8 & 1 \\ -3 & 9 & -3 & -4 \\ -10 & 0 & -6 & -7 \end{bmatrix} \quad B = \begin{bmatrix} -10 & 9 & 0 & 7 \\ 0 & 2 & -1 & -1 \\ 3 & -6 & 7 & -3 \\ -2 & 8 & -6 & -10 \end{bmatrix} \quad AB = ?$$

question145

$$A = \begin{bmatrix} -5 & 4 & 6 & 0 \\ -9 & -9 & -3 & 0 \\ -7 & 2 & -7 & -7 \\ -10 & 1 & -3 & 5 \end{bmatrix} \quad B = \begin{bmatrix} 6 & 3 & -9 & 8 \\ 2 & 0 & -8 & 0 \\ -2 & 6 & 7 & 9 \\ 4 & 2 & -5 & 9 \end{bmatrix} \quad AB = ?$$

question146

$$A = \begin{bmatrix} 0 & -1 & 5 & -6 \\ 0 & -6 & -10 & 0 \\ 4 & 3 & -4 & 8 \\ 5 & -4 & 3 & 6 \end{bmatrix} \quad B = \begin{bmatrix} 9 & 6 & -6 & 7 \\ -8 & 6 & 9 & 6 \\ -5 & 8 & -6 & 5 \\ -1 & 2 & -3 & -7 \end{bmatrix} \quad AB = ?$$

question147

$$A = \begin{bmatrix} -10 & -6 & -4 & -5 \\ -1 & -10 & 9 & 8 \\ -2 & 0 & -4 & 3 \\ 3 & 7 & -8 & -2 \end{bmatrix} \quad B = \begin{bmatrix} 0 & -7 & 1 & 8 \\ 7 & -6 & 0 & 6 \\ -5 & 7 & 0 & -9 \\ 2 & -10 & 1 & 4 \end{bmatrix} \quad AB = ?$$

question148

$$A = \begin{bmatrix} 6 & 9 & 6 & -3 \\ 0 & 5 & 4 & -5 \\ -7 & 0 & 6 & -3 \\ 3 & 0 & -3 & 9 \end{bmatrix} \quad B = \begin{bmatrix} 0 & -7 & -6 & 3 \\ 7 & 8 & 5 & -4 \\ -6 & -9 & 6 & -4 \\ 5 & 8 & 6 & -6 \end{bmatrix} \quad AB = ?$$

question149

$$A = \begin{bmatrix} -4 & -9 & -7 & 9 \\ 7 & -8 & 2 & -1 \\ 9 & -8 & -8 & -2 \\ -1 & -9 & -2 & 6 \end{bmatrix} \quad B = \begin{bmatrix} -9 & -4 & 4 & -7 \\ 5 & -8 & 7 & 5 \\ -10 & 2 & 0 & 5 \\ 6 & 4 & -1 & -2 \end{bmatrix} \quad AB = ?$$

$$A = \begin{bmatrix} 4 & -8 & -7 & 2 \\ 2 & 9 & 6 & -5 \\ 4 & -4 & 1 & -8 \\ 5 & -3 & 6 & -5 \end{bmatrix} \quad B = \begin{bmatrix} -3 & -5 & 4 & -6 \\ -1 & 2 & 9 & -7 \\ 8 & 3 & 9 & 4 \\ -10 & -6 & -5 & 8 \end{bmatrix} \quad AB = ?$$

2 Matrix Inverse

question1

$$A = \begin{bmatrix} -5 & -2 \\ -9 & -3 \end{bmatrix} \quad A^{-1} = ?$$

question2

$$A = \begin{bmatrix} -8 & 0 \\ -10 & 4 \end{bmatrix} \quad A^{-1} = ?$$

question3

$$A = \begin{bmatrix} 8 & -7 \\ 4 & -1 \end{bmatrix} \quad A^{-1} = ?$$

question4

$$A = \begin{bmatrix} 2 & -9 \\ 0 & -5 \end{bmatrix} \quad A^{-1} = ?$$

question5

$$A = \begin{bmatrix} 9 & -1 \\ 8 & -10 \end{bmatrix} \quad A^{-1} = ?$$

question6

$$A = \begin{bmatrix} 5 & 7 \\ -5 & 8 \end{bmatrix} \quad A^{-1} = ?$$

question7

$$A = \begin{bmatrix} 2 & -2 \\ -1 & -3 \end{bmatrix} \quad A^{-1} = ?$$

question8

$$A = \begin{bmatrix} 4 & 3 \\ 4 & 0 \end{bmatrix} \quad A^{-1} = ?$$

question9

$$A = \begin{bmatrix} 9 & -8 \\ 3 & -7 \end{bmatrix} \quad A^{-1} = ?$$

question10

$$A = \begin{bmatrix} -1 & -3 \\ 0 & 8 \end{bmatrix} \quad A^{-1} = ?$$

question11

$$A = \begin{bmatrix} 5 & -2 \\ 5 & -6 \end{bmatrix} \quad A^{-1} = ?$$

question12

$$A = \begin{bmatrix} 6 & 7 \\ -9 & 0 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 3 & 8 \\ -5 & -10 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -10 & 8 \\ 2 & 2 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -6 & -8 \\ -6 & 0 \end{bmatrix} \quad A^{-1} = ?$$

question16

$$A = \begin{bmatrix} -8 & -3 \\ 4 & 8 \end{bmatrix} \quad A^{-1} = ?$$

question17

$$A = \begin{bmatrix} -8 & -8 \\ -3 & 8 \end{bmatrix} \quad A^{-1} = ?$$

question18

$$A = \begin{bmatrix} -5 & -3 \\ -9 & -8 \end{bmatrix} \quad A^{-1} = ?$$

question19

$$A = \begin{bmatrix} -8 & 5 \\ -3 & 4 \end{bmatrix} \quad A^{-1} = ?$$

question20

$$A = \begin{bmatrix} 3 & -3 \\ -5 & -6 \end{bmatrix} \quad A^{-1} = ?$$

question21

$$A = \begin{bmatrix} -3 & 3 \\ -6 & -5 \end{bmatrix} \quad A^{-1} = ?$$

question22

$$A = \begin{bmatrix} 7 & -6 \\ 1 & 1 \end{bmatrix} \quad A^{-1} = ?$$

question23

$$A = \begin{bmatrix} 0 & -10 \\ 1 & -2 \end{bmatrix} \quad A^{-1} = ?$$

question24

$$A = \begin{bmatrix} 5 & -1 \\ 3 & 3 \end{bmatrix} \quad A^{-1} = ?$$

question25

$$A = \begin{bmatrix} -4 & -8 \\ -1 & 2 \end{bmatrix} \quad A^{-1} = ?$$

question26

$$A = \begin{bmatrix} -4 & -5 \\ -4 & 6 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -10 & 6 \\ 6 & 2 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 9 & -1 \\ 5 & -9 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 6 & -9 \\ -6 & 5 \end{bmatrix} \quad A^{-1} = ?$$

question30

$$A = \begin{bmatrix} -10 & -1 \\ 5 & -5 \end{bmatrix} \quad A^{-1} = ?$$

question31

$$A = \begin{bmatrix} -10 & -10 \\ 7 & 6 \end{bmatrix} \quad A^{-1} = ?$$

question32

$$A = \begin{bmatrix} 1 & 8 \\ 2 & 1 \end{bmatrix} \quad A^{-1} = ?$$

question33

$$A = \begin{bmatrix} -3 & 7 \\ -9 & 1 \end{bmatrix} \quad A^{-1} = ?$$

question34

$$A = \begin{bmatrix} 3 & -3 \\ -6 & -2 \end{bmatrix} \quad A^{-1} = ?$$

question35

$$A = \begin{bmatrix} 0 & -8 \\ -10 & 5 \end{bmatrix} \quad A^{-1} = ?$$

question36

$$A = \begin{bmatrix} -4 & 7 \\ -9 & -8 \end{bmatrix} \quad A^{-1} = ?$$

question37

$$A = \begin{bmatrix} 1 & 8 \\ -8 & 9 \end{bmatrix} \quad A^{-1} = ?$$

question38

$$A = \begin{bmatrix} -10 & -6 \\ -1 & -4 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 0 & 9 \\ 9 & 4 \end{bmatrix} \quad A^{-1} = ?$$

question40

$$A = \begin{bmatrix} 4 & -4 \\ -7 & -9 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 7 & 8 \\ 8 & 3 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 5 & 0 \\ 5 & 5 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -9 & -6 \\ 7 & -10 \end{bmatrix} \quad A^{-1} = ?$$

question44

$$A = \begin{bmatrix} -5 & -2 \\ -10 & 8 \end{bmatrix} \quad A^{-1} = ?$$

question45

$$A = \begin{bmatrix} 7 & -1 \\ -2 & 0 \end{bmatrix} \quad A^{-1} = ?$$

question46

$$A = \begin{bmatrix} -3 & 1\\ 1 & -5 \end{bmatrix} \quad A^{-1} = ?$$

question47

$$A = \begin{bmatrix} 3 & -8 \\ -6 & 7 \end{bmatrix} \quad A^{-1} = ?$$

question48

$$A = \begin{bmatrix} -6 & 7 \\ -10 & -2 \end{bmatrix} \quad A^{-1} = ?$$

question49

$$A = \begin{bmatrix} -4 & -8 \\ -10 & 7 \end{bmatrix} \quad A^{-1} = ?$$

question50

$$A = \begin{bmatrix} -9 & -9 \\ 4 & -3 \end{bmatrix} \quad A^{-1} = ?$$

${\bf question 51}$

$$A = \begin{bmatrix} 5 & 1 & 3 \\ 3 & 2 & -8 \\ -5 & -7 & -8 \end{bmatrix} \quad A^{-1} = ?$$

question52

$$A = \begin{bmatrix} -8 & -3 & -6 \\ 4 & 8 & -10 \\ 0 & -8 & -7 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -9 & 2 & 4 \\ -6 & 2 & -5 \\ -3 & 1 & -1 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 7 & 7 & 1 \\ -7 & -9 & 7 \\ -3 & 1 & -3 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -10 & -5 & -7 \\ -8 & 8 & 6 \\ 9 & 3 & -8 \end{bmatrix} \quad A^{-1} = ?$$

question56

$$A = \begin{bmatrix} 3 & 4 & 1 \\ 3 & -1 & 6 \\ 7 & 9 & -4 \end{bmatrix} \quad A^{-1} = ?$$

question57

$$A = \begin{bmatrix} -4 & -10 & -3 \\ 7 & -6 & 0 \\ -5 & 3 & -2 \end{bmatrix} \quad A^{-1} = ?$$

question58

$$A = \begin{bmatrix} -10 & -3 & -1 \\ -5 & 2 & -2 \\ 0 & 3 & -1 \end{bmatrix} \quad A^{-1} = ?$$

question59

$$A = \begin{bmatrix} -2 & -8 & 5 \\ 8 & 6 & -4 \\ -6 & -4 & 6 \end{bmatrix} \quad A^{-1} = ?$$

question60

$$A = \begin{bmatrix} -2 & 2 & 6\\ 3 & -3 & -1\\ -8 & -5 & 4 \end{bmatrix} \quad A^{-1} = ?$$

question61

$$A = \begin{bmatrix} 4 & -1 & -6 \\ -1 & -9 & -2 \\ -9 & 8 & -7 \end{bmatrix} \quad A^{-1} = ?$$

question62

$$A = \begin{bmatrix} -6 & 3 & -3\\ 0 & 3 & 2\\ 9 & -1 & 1 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 8 & 5 & 0 \\ 5 & -9 & 1 \\ 0 & -4 & -10 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 3 & 2 & -4 \\ -1 & -8 & -7 \\ 1 & 0 & -3 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 4 & 9 & -5 \\ -2 & 0 & -6 \\ -8 & 0 & -5 \end{bmatrix} \quad A^{-1} = ?$$

question66

$$A = \begin{bmatrix} -1 & -3 & 9 \\ -7 & 3 & -7 \\ 2 & 3 & 7 \end{bmatrix} \quad A^{-1} = ?$$

question67

$$A = \begin{bmatrix} 4 & 3 & -7 \\ -9 & -9 & 2 \\ -3 & 2 & 7 \end{bmatrix} \quad A^{-1} = ?$$

question68

$$A = \begin{bmatrix} 7 & 1 & 3 \\ -8 & -9 & 0 \\ -6 & -5 & -2 \end{bmatrix} \quad A^{-1} = ?$$

question69

$$A = \begin{bmatrix} 5 & -9 & -8 \\ 7 & 2 & -2 \\ 7 & -1 & -4 \end{bmatrix} \quad A^{-1} = ?$$

question70

$$A = \begin{bmatrix} -9 & -7 & -10 \\ 4 & -1 & -9 \\ 4 & 4 & -10 \end{bmatrix} \quad A^{-1} = ?$$

question71

$$A = \begin{bmatrix} -2 & -5 & -10 \\ 5 & 9 & 8 \\ -4 & -4 & 7 \end{bmatrix} \quad A^{-1} = ?$$

question72

$$A = \begin{bmatrix} -7 & -3 & 8 \\ -8 & -3 & 0 \\ 4 & -4 & 5 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 7 & -8 & 7 \\ 5 & -8 & -2 \\ -9 & 8 & -7 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 9 & -9 & 3 \\ 6 & -2 & 2 \\ -5 & 2 & 5 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -8 & 7 & 2\\ 0 & -4 & 3\\ -1 & -10 & -9 \end{bmatrix} \quad A^{-1} = ?$$

question76

$$A = \begin{bmatrix} 8 & -10 & 0 \\ 0 & 7 & 7 \\ -8 & 8 & -3 \end{bmatrix} \quad A^{-1} = ?$$

question77

$$A = \begin{bmatrix} -6 & 6 & 8 \\ -2 & -9 & -3 \\ -2 & 7 & 2 \end{bmatrix} \quad A^{-1} = ?$$

question78

$$A = \begin{bmatrix} -9 & -2 & -9 \\ 8 & -4 & 8 \\ 5 & -2 & -5 \end{bmatrix} \quad A^{-1} = ?$$

question79

$$A = \begin{bmatrix} 1 & 2 & 4 \\ 3 & -7 & 7 \\ 4 & 3 & -7 \end{bmatrix} \quad A^{-1} = ?$$

question80

$$A = \begin{bmatrix} 9 & 6 & -2 \\ -2 & -2 & -7 \\ 0 & 4 & 3 \end{bmatrix} \quad A^{-1} = ?$$

question81

$$A = \begin{bmatrix} 7 & -9 & -3 \\ 6 & -7 & -5 \\ 3 & 3 & 8 \end{bmatrix} \quad A^{-1} = ?$$

question82

$$A = \begin{bmatrix} -9 & 3 & 2 \\ -1 & -9 & 1 \\ 7 & 5 & -5 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -10 & -5 & 5\\ 1 & -6 & 3\\ -2 & 3 & -2 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -3 & 1 & -2 \\ 7 & 6 & -8 \\ -6 & 2 & 7 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -8 & -6 & -4 \\ -9 & -7 & 8 \\ -3 & 4 & -7 \end{bmatrix} \quad A^{-1} = ?$$

question86

$$A = \begin{bmatrix} 5 & 0 & 8 \\ 3 & -2 & 8 \\ -3 & -1 & -3 \end{bmatrix} \quad A^{-1} = ?$$

question87

$$A = \begin{bmatrix} 6 & -2 & 6 \\ 5 & 9 & 4 \\ 5 & -8 & -9 \end{bmatrix} \quad A^{-1} = ?$$

question88

$$A = \begin{bmatrix} 1 & 2 & -8 \\ 2 & 3 & 3 \\ -6 & -8 & 8 \end{bmatrix} \quad A^{-1} = ?$$

question89

$$A = \begin{bmatrix} -10 & 8 & -6 \\ 2 & 8 & -3 \\ 5 & -10 & 5 \end{bmatrix} \quad A^{-1} = ?$$

question90

$$A = \begin{bmatrix} 9 & 0 & 7 \\ -8 & 4 & 2 \\ 8 & 7 & -3 \end{bmatrix} \quad A^{-1} = ?$$

question91

$$A = \begin{bmatrix} -8 & -9 & -8 \\ -7 & 5 & 5 \\ -10 & -4 & 4 \end{bmatrix} \quad A^{-1} = ?$$

question92

$$A = \begin{bmatrix} 1 & -10 & -9 \\ -3 & 5 & -8 \\ 8 & 7 & 7 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -2 & -8 & -4 \\ -8 & -7 & 4 \\ -6 & 9 & 9 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -2 & 7 & 4 \\ 6 & -7 & 7 \\ -6 & 3 & -5 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -7 & -4 & -10 \\ -10 & 2 & -5 \\ 4 & -7 & -10 \end{bmatrix} \quad A^{-1} = ?$$

question96

$$A = \begin{bmatrix} 4 & 1 & -6 \\ 0 & 6 & -5 \\ -2 & -6 & -9 \end{bmatrix} \quad A^{-1} = ?$$

question97

$$A = \begin{bmatrix} 1 & -4 & -3 \\ -8 & -3 & 6 \\ -10 & 6 & 8 \end{bmatrix} \quad A^{-1} = ?$$

question98

$$A = \begin{bmatrix} 8 & -5 & 5 \\ 4 & -2 & -7 \\ 6 & -9 & -1 \end{bmatrix} \quad A^{-1} = ?$$

question99

$$A = \begin{bmatrix} -4 & -1 & 4 \\ 2 & -5 & 0 \\ 8 & 8 & 2 \end{bmatrix} \quad A^{-1} = ?$$

question100

$$A = \begin{bmatrix} 1 & -3 & 9 \\ -6 & 1 & 8 \\ -3 & 5 & -4 \end{bmatrix} \quad A^{-1} = ?$$

question101

$$A = \begin{bmatrix} 2 & 6 & 4 & 7 \\ -3 & 9 & 1 & -2 \\ 1 & 1 & 1 & -7 \\ 6 & 3 & -5 & 8 \end{bmatrix} \quad A^{-1} = ?$$

question102

$$A = \begin{bmatrix} -2 & 2 & -1 & -8 \\ 4 & -6 & 4 & 9 \\ -6 & 8 & 6 & 4 \\ 7 & -7 & -6 & 9 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -5 & -5 & -2 & 9 \\ -3 & 1 & -3 & -4 \\ 9 & -1 & 9 & -6 \\ 4 & 1 & -8 & -9 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -1 & -2 & 9 & -10 \\ -3 & 9 & 1 & 6 \\ -10 & 4 & 6 & 2 \\ -5 & 3 & 4 & -2 \end{bmatrix} \quad A^{-1} = ?$$

question105

$$A = \begin{bmatrix} 7 & -4 & -10 & 5 \\ -9 & 0 & 9 & 5 \\ 8 & 2 & 1 & -6 \\ -4 & -3 & 7 & 6 \end{bmatrix} \quad A^{-1} = ?$$

question 106

$$A = \begin{bmatrix} 9 & 0 & -3 & 7 \\ -2 & 5 & -2 & 4 \\ 0 & -9 & -5 & -4 \\ 3 & 0 & 2 & -7 \end{bmatrix} \quad A^{-1} = ?$$

question107

$$A = \begin{bmatrix} 6 & -2 & -8 & -5 \\ 3 & 5 & 9 & -5 \\ 9 & -6 & -8 & -9 \\ -8 & -4 & 2 & -6 \end{bmatrix} \quad A^{-1} = ?$$

question108

$$A = \begin{bmatrix} 5 & -8 & -8 & 4 \\ 5 & -1 & -4 & 1 \\ 4 & -1 & -3 & -2 \\ 9 & -6 & -9 & 4 \end{bmatrix} \quad A^{-1} = ?$$

question109

$$A = \begin{bmatrix} -4 & -5 & 5 & 9 \\ -3 & 9 & -10 & 8 \\ 4 & -9 & 4 & -4 \\ -2 & 8 & -3 & -5 \end{bmatrix} \quad A^{-1} = ?$$

question110

$$A = \begin{bmatrix} -7 & -6 & 2 & 0 \\ -5 & -1 & 5 & -2 \\ -9 & 5 & -5 & -1 \\ -5 & -3 & -4 & -3 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -4 & -9 & -7 & 9 \\ 4 & -8 & 2 & 0 \\ -2 & -10 & 4 & 9 \\ -1 & -3 & 6 & 6 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -5 & -3 & 7 & 6 \\ -9 & 1 & 8 & -6 \\ -7 & 4 & 9 & 7 \\ 3 & -6 & 1 & -8 \end{bmatrix} \quad A^{-1} = ?$$

question113

$$A = \begin{bmatrix} 0 & -4 & -3 & 2 \\ -1 & -5 & -8 & -1 \\ -8 & 8 & -9 & -6 \\ 1 & 2 & 9 & 8 \end{bmatrix} \quad A^{-1} = ?$$

question114

$$A = \begin{bmatrix} 4 & -8 & 0 & 7 \\ -2 & 3 & 6 & 5 \\ -4 & -3 & -1 & -10 \\ -2 & -7 & 0 & -1 \end{bmatrix} \quad A^{-1} = ?$$

question115

$$A = \begin{bmatrix} 0 & 1 & -3 & 7 \\ -3 & -1 & 3 & -2 \\ 6 & 7 & -5 & -1 \\ -1 & -4 & -9 & -6 \end{bmatrix} \quad A^{-1} = ?$$

question116

$$A = \begin{bmatrix} 2 & 0 & -8 & -2 \\ 6 & -8 & -6 & -5 \\ -10 & 1 & -3 & 4 \\ 1 & -1 & 8 & -3 \end{bmatrix} \quad A^{-1} = ?$$

question117

$$A = \begin{bmatrix} -5 & 1 & 7 & -10 \\ 3 & -5 & -4 & -1 \\ 2 & -5 & -6 & 5 \\ -1 & 3 & -2 & 9 \end{bmatrix} \quad A^{-1} = ?$$

question118

$$A = \begin{bmatrix} 9 & 4 & -6 & -5 \\ -9 & 5 & 3 & -8 \\ -10 & 1 & 8 & 3 \\ -4 & 5 & -10 & 5 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -1 & 3 & 1 & 9 \\ -2 & 1 & 6 & -9 \\ -7 & -7 & -1 & 6 \\ 4 & 8 & 3 & -5 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 6 & -7 & -4 & -9 \\ 5 & -6 & -7 & -3 \\ -2 & 3 & 6 & 3 \\ 9 & 3 & -1 & 9 \end{bmatrix} \quad A^{-1} = ?$$

question121

$$A = \begin{bmatrix} -9 & -5 & 0 & -9 \\ -6 & 8 & 2 & -4 \\ 8 & 5 & -1 & 3 \\ -1 & 2 & -1 & 7 \end{bmatrix} \quad A^{-1} = ?$$

question122

$$A = \begin{bmatrix} -9 & -9 & 7 & 4 \\ 2 & 7 & -2 & -4 \\ 7 & 1 & -2 & -1 \\ -8 & 1 & -3 & 7 \end{bmatrix} \quad A^{-1} = ?$$

question123

$$A = \begin{bmatrix} -9 & -7 & -10 & -10 \\ -9 & 5 & -10 & -3 \\ 5 & -7 & 3 & 2 \\ -10 & -4 & -9 & 8 \end{bmatrix} \quad A^{-1} = ?$$

question124

$$A = \begin{bmatrix} -8 & 5 & -1 & 1 \\ -6 & 6 & 7 & -7 \\ -7 & 3 & -4 & 5 \\ -6 & -1 & 3 & -1 \end{bmatrix} \quad A^{-1} = ?$$

question125

$$A = \begin{bmatrix} 2 & -9 & -4 & -6 \\ -10 & -3 & 5 & 8 \\ 3 & -3 & 5 & 2 \\ 3 & 0 & 4 & 4 \end{bmatrix} \quad A^{-1} = ?$$

question126

$$A = \begin{bmatrix} -5 & 0 & 4 & -6 \\ 5 & -10 & -2 & -3 \\ -5 & 3 & -1 & 6 \\ 7 & -10 & -10 & 6 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -1 & 5 & 2 & 0 \\ 0 & 7 & -9 & 3 \\ 9 & 5 & 0 & -7 \\ -8 & -8 & 6 & -6 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 2 & -4 & 0 & 1 \\ -10 & 3 & 1 & 1 \\ 4 & 0 & 3 & -1 \\ -1 & -4 & -7 & 5 \end{bmatrix} \quad A^{-1} = ?$$

question129

$$A = \begin{bmatrix} 0 & -10 & -6 & 7 \\ 9 & 7 & -9 & 3 \\ -6 & 1 & 7 & -4 \\ -9 & 4 & 8 & 9 \end{bmatrix} \quad A^{-1} = ?$$

question130

$$A = \begin{bmatrix} -2 & 4 & 5 & 5 \\ -5 & 7 & -10 & -2 \\ -2 & -9 & -1 & -2 \\ 5 & -4 & -7 & 7 \end{bmatrix} \quad A^{-1} = ?$$

question131

$$A = \begin{bmatrix} 0 & 5 & -4 & 6 \\ 5 & -5 & -5 & 1 \\ -7 & -7 & 1 & -3 \\ 0 & -3 & -6 & 9 \end{bmatrix} \quad A^{-1} = ?$$

question132

$$A = \begin{bmatrix} 2 & 8 & -6 & -1 \\ 2 & 6 & -6 & 2 \\ -1 & 1 & -10 & -7 \\ -2 & 3 & -2 & -6 \end{bmatrix} \quad A^{-1} = ?$$

question133

$$A = \begin{bmatrix} -4 & -10 & 4 & -8 \\ -1 & -4 & -5 & 6 \\ 3 & -3 & 1 & 3 \\ 7 & -6 & 2 & -8 \end{bmatrix} \quad A^{-1} = ?$$

question134

$$A = \begin{bmatrix} -6 & 3 & 4 & 8 \\ 9 & -8 & 6 & -9 \\ -8 & 5 & -4 & 9 \\ 0 & -7 & -4 & -10 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -3 & -5 & 0 & -8 \\ 5 & -5 & -4 & -7 \\ -5 & 4 & 5 & 7 \\ 2 & -1 & 2 & -2 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -8 & -7 & 0 & -8 \\ -2 & 4 & 6 & -2 \\ 8 & 4 & 9 & 2 \\ -7 & -9 & -7 & -7 \end{bmatrix} \quad A^{-1} = ?$$

question137

$$A = \begin{bmatrix} -2 & -6 & 6 & -4 \\ 2 & 9 & 7 & 9 \\ 4 & -6 & -1 & -7 \\ 0 & -4 & -1 & -2 \end{bmatrix} \quad A^{-1} = ?$$

question138

$$A = \begin{bmatrix} 4 & 5 & -1 & -5 \\ 6 & 7 & -10 & -7 \\ -9 & 4 & 1 & 3 \\ -6 & 4 & 1 & 4 \end{bmatrix} \quad A^{-1} = ?$$

question139

$$A = \begin{bmatrix} 2 & -4 & 6 & 4 \\ -2 & 3 & 0 & 4 \\ 9 & 1 & 5 & 6 \\ 3 & -2 & 3 & 8 \end{bmatrix} \quad A^{-1} = ?$$

question140

$$A = \begin{bmatrix} 9 & -6 & 6 & 9 \\ 5 & -6 & 7 & 8 \\ 3 & -6 & 2 & 8 \\ 0 & 6 & -7 & -5 \end{bmatrix} \quad A^{-1} = ?$$

question141

$$A = \begin{bmatrix} 7 & 0 & 7 & 9 \\ 6 & -10 & -6 & -5 \\ -6 & -1 & -1 & 3 \\ -4 & -5 & -5 & -10 \end{bmatrix} \quad A^{-1} = ?$$

question142

$$A = \begin{bmatrix} -3 & 0 & -8 & 9 \\ 7 & 5 & -1 & -4 \\ 3 & -9 & -7 & -1 \\ 8 & 8 & -10 & 2 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} -1 & -2 & 3 & -5 \\ -2 & -4 & 2 & -2 \\ 9 & 8 & 1 & 6 \\ 7 & 6 & 9 & -6 \end{bmatrix} \quad A^{-1} = ?$$

$$A = \begin{bmatrix} 9 & 4 & 1 & -5 \\ 1 & -8 & 8 & 8 \\ -4 & -9 & -2 & 5 \\ -2 & 9 & 4 & 7 \end{bmatrix} \quad A^{-1} = ?$$

question145

$$A = \begin{bmatrix} 9 & 5 & 0 & 0 \\ -6 & -7 & -10 & -2 \\ -2 & 6 & 5 & 4 \\ 9 & -3 & -5 & -8 \end{bmatrix} \quad A^{-1} = ?$$

question146

$$A = \begin{bmatrix} -4 & 0 & 5 & -4 \\ -5 & -3 & 7 & -10 \\ -9 & -2 & -5 & 4 \\ -4 & 0 & 4 & 9 \end{bmatrix} \quad A^{-1} = ?$$

question147

$$A = \begin{bmatrix} -8 & 7 & -8 & 6 \\ 2 & -1 & 1 & 4 \\ 4 & -4 & -6 & -2 \\ -5 & -7 & -6 & 2 \end{bmatrix} \quad A^{-1} = ?$$

question148

$$A = \begin{bmatrix} 1 & -4 & 1 & -4 \\ 7 & 3 & -8 & 8 \\ 9 & -6 & -7 & -7 \\ -5 & -7 & 8 & 0 \end{bmatrix} \quad A^{-1} = ?$$

question149

$$A = \begin{bmatrix} 3 & -5 & -8 & -6 \\ 5 & -4 & 2 & 0 \\ 6 & 9 & -7 & 3 \\ -4 & -9 & -2 & -1 \end{bmatrix} \quad A^{-1} = ?$$

question150

$$A = \begin{bmatrix} 2 & 1 & 5 & -4 \\ -3 & -5 & -2 & -6 \\ 0 & 9 & 2 & -9 \\ -8 & -3 & 9 & 4 \end{bmatrix} \quad A^{-1} = ?$$

3 Matrix Determinant

question1

$$A = \begin{bmatrix} -8 & -3 \\ 3 & -9 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 8 & -3 \\ 8 & -10 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 4 & -10 \\ 5 & 6 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 2 & -6 \\ -10 & 7 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 2 & -1 \\ -2 & 2 \end{bmatrix} \quad |A| = ?$$

question6

$$A = \begin{bmatrix} 4 & 3 \\ 0 & -10 \end{bmatrix} \quad |A| = ?$$

question7

$$A = \begin{bmatrix} -6 & -6 \\ -8 & 6 \end{bmatrix} \quad |A| = ?$$

question8

$$A = \begin{bmatrix} -6 & -4 \\ -10 & -4 \end{bmatrix} \quad |A| = ?$$

question9

$$A = \begin{bmatrix} -3 & -8 \\ 4 & -4 \end{bmatrix} \quad |A| = ?$$

${\bf question 10}$

$$A = \begin{bmatrix} 4 & 6 \\ 2 & 9 \end{bmatrix} \quad |A| = ?$$

question11

$$A = \begin{bmatrix} -4 & -5 \\ -4 & -10 \end{bmatrix} \quad |A| = ?$$

question12

$$A = \begin{bmatrix} -6 & -4 \\ 1 & 1 \end{bmatrix} \quad |A| = ?$$

question13

$$A = \begin{bmatrix} 5 & -8 \\ -8 & 8 \end{bmatrix} \quad |A| = ?$$

question14

$$A = \begin{bmatrix} 5 & 7 \\ 4 & 3 \end{bmatrix} \quad |A| = ?$$

question15

$$A = \begin{bmatrix} -9 & -9 \\ -3 & -10 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 3 & 2 \\ 5 & 6 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 4 & 7 \\ -3 & -6 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -7 & 3 \\ 3 & -3 \end{bmatrix} \quad |A| = ?$$

question19

$$A = \begin{bmatrix} -4 & -5 \\ -7 & -3 \end{bmatrix} \quad |A| = ?$$

question20

$$A = \begin{bmatrix} -8 & 4 \\ -6 & 7 \end{bmatrix} \quad |A| = ?$$

question21

$$A = \begin{bmatrix} -1 & 2 \\ -2 & 2 \end{bmatrix} \quad |A| = ?$$

question22

$$A = \begin{bmatrix} -4 & -10 \\ 4 & -5 \end{bmatrix} \quad |A| = ?$$

question23

$$A = \begin{bmatrix} -10 & 4 \\ 0 & -2 \end{bmatrix} \quad |A| = ?$$

question24

$$A = \begin{bmatrix} -6 & -3 \\ -3 & -4 \end{bmatrix} \quad |A| = ?$$

question25

$$A = \begin{bmatrix} -3 & -10 \\ -2 & 0 \end{bmatrix} \quad |A| = ?$$

question26

$$A = \begin{bmatrix} 9 & -5 \\ 0 & -2 \end{bmatrix} \quad |A| = ?$$

question27

$$A = \begin{bmatrix} -7 & -8 \\ 9 & 1 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 2 & -9 \\ 0 & 6 \end{bmatrix} \quad |A| = ?$$

question29

$$A = \begin{bmatrix} 9 & 3 \\ -4 & -8 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -10 & -10 \\ -7 & 1 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 8 & -9 \\ 9 & -7 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -4 & 2\\ 9 & -9 \end{bmatrix} \quad |A| = ?$$

question33

$$A = \begin{bmatrix} -10 & 7 \\ 0 & 8 \end{bmatrix} \quad |A| = ?$$

question34

$$A = \begin{bmatrix} -7 & 0 \\ 2 & 1 \end{bmatrix} \quad |A| = ?$$

question35

$$A = \begin{bmatrix} 9 & 5 \\ -2 & 8 \end{bmatrix} \quad |A| = ?$$

question36

$$A = \begin{bmatrix} 7 & -6 \\ 1 & -1 \end{bmatrix} \quad |A| = ?$$

question37

$$A = \begin{bmatrix} -8 & 0 \\ 6 & -7 \end{bmatrix} \quad |A| = ?$$

question38

$$A = \begin{bmatrix} -6 & -10 \\ -3 & -1 \end{bmatrix} \quad |A| = ?$$

${\bf question 39}$

$$A = \begin{bmatrix} -8 & 5\\ 9 & -7 \end{bmatrix} \quad |A| = ?$$

question40

$$A = \begin{bmatrix} -2 & -8 \\ -9 & -3 \end{bmatrix} \quad |A| = ?$$

question41

$$A = \begin{bmatrix} 9 & -2 \\ -1 & 8 \end{bmatrix} \quad |A| = ?$$

question 42

$$A = \begin{bmatrix} -5 & -9 \\ 8 & 3 \end{bmatrix} \quad |A| = ?$$

question43

$$A = \begin{bmatrix} 1 & 9 \\ 0 & -2 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -7 & 9 \\ -9 & -4 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -5 & -9 \\ 9 & 4 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -6 & -9 \\ 5 & 7 \end{bmatrix} \quad |A| = ?$$

question47

$$A = \begin{bmatrix} 7 & 9 \\ -7 & 1 \end{bmatrix} \quad |A| = ?$$

question48

$$A = \begin{bmatrix} -7 & 6 \\ 3 & 4 \end{bmatrix} \quad |A| = ?$$

question49

$$A = \begin{bmatrix} -1 & -2 \\ 9 & -1 \end{bmatrix} \quad |A| = ?$$

question50

$$A = \begin{bmatrix} -8 & -4 \\ -9 & 9 \end{bmatrix} \quad |A| = ?$$

question51

$$A = \begin{bmatrix} -8 & -4 & -3 \\ -2 & -4 & 4 \\ 1 & -4 & -6 \end{bmatrix} \quad |A| = ?$$

${\it question 52}$

$$A = \begin{bmatrix} 0 & 7 & -10 \\ -9 & -6 & -4 \\ 0 & -8 & 3 \end{bmatrix} \quad |A| = ?$$

question 53

$$A = \begin{bmatrix} -3 & -5 & 9 \\ -3 & 1 & 4 \\ 1 & -3 & 7 \end{bmatrix} \quad |A| = ?$$

question54

$$A = \begin{bmatrix} -2 & -5 & 2\\ 4 & -9 & -9\\ -4 & 8 & -7 \end{bmatrix} \quad |A| = ?$$

question55

$$A = \begin{bmatrix} 7 & -10 & -1 \\ 0 & 7 & 7 \\ 6 & -3 & -2 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 2 & 8 & 9 \\ -2 & 4 & 6 \\ -9 & -6 & -8 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 8 & -7 & 2 \\ -8 & 1 & 1 \\ 4 & 6 & 0 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 2 & -5 & -4 \\ 9 & 1 & 3 \\ 2 & 1 & -5 \end{bmatrix} \quad |A| = ?$$

question59

$$A = \begin{bmatrix} -4 & -10 & -6 \\ 6 & -1 & -8 \\ 2 & -9 & 5 \end{bmatrix} \quad |A| = ?$$

question60

$$A = \begin{bmatrix} -1 & -8 & 3 \\ -6 & 1 & -9 \\ 5 & 3 & -1 \end{bmatrix} \quad |A| = ?$$

question61

$$A = \begin{bmatrix} 1 & -1 & 3 \\ 4 & -8 & 5 \\ -9 & 9 & 0 \end{bmatrix} \quad |A| = ?$$

question62

$$A = \begin{bmatrix} -5 & -10 & -4 \\ -1 & 8 & -1 \\ -3 & 6 & -6 \end{bmatrix} \quad |A| = ?$$

question63

$$A = \begin{bmatrix} 3 & 0 & 3 \\ 3 & -4 & 2 \\ 1 & -2 & 5 \end{bmatrix} \quad |A| = ?$$

question64

$$A = \begin{bmatrix} -1 & 5 & -10 \\ -6 & 9 & 1 \\ 6 & -8 & 1 \end{bmatrix} \quad |A| = ?$$

question65

$$A = \begin{bmatrix} -6 & -4 & -10 \\ -8 & 6 & 4 \\ -6 & 2 & -1 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -5 & 8 & 7 \\ 0 & -6 & 3 \\ 3 & 5 & 3 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 9 & -1 & 5 \\ 1 & 7 & -4 \\ -4 & -3 & 4 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 9 & -9 & 5 \\ -10 & -3 & -6 \\ 6 & -4 & 4 \end{bmatrix} \quad |A| = ?$$

question69

$$A = \begin{bmatrix} -4 & 2 & -9 \\ -5 & 4 & 1 \\ 3 & -6 & 6 \end{bmatrix} \quad |A| = ?$$

question70

$$A = \begin{bmatrix} 4 & -1 & -8 \\ -8 & 9 & -4 \\ -8 & 1 & -9 \end{bmatrix} \quad |A| = ?$$

question71

$$A = \begin{bmatrix} 5 & 3 & -5 \\ -4 & -3 & -10 \\ 4 & 7 & -8 \end{bmatrix} \quad |A| = ?$$

question72

$$A = \begin{bmatrix} 1 & -9 & -8 \\ -8 & 2 & -8 \\ -10 & 1 & -1 \end{bmatrix} \quad |A| = ?$$

question73

$$A = \begin{bmatrix} 7 & 4 & -1 \\ 7 & -8 & -1 \\ -4 & -8 & 6 \end{bmatrix} \quad |A| = ?$$

question74

$$A = \begin{bmatrix} 1 & 0 & 0 \\ -7 & -9 & 9 \\ -9 & 7 & 6 \end{bmatrix} \quad |A| = ?$$

question75

$$A = \begin{bmatrix} 2 & 9 & -10 \\ -4 & -2 & -9 \\ 1 & -9 & 2 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 7 & -9 & 7 \\ -7 & 5 & 4 \\ 6 & -5 & -4 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -4 & -2 & 5\\ 6 & -3 & -7\\ 0 & -1 & -7 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 9 & 6 & -10 \\ 1 & 3 & -9 \\ 0 & -6 & -8 \end{bmatrix} \quad |A| = ?$$

question79

$$A = \begin{bmatrix} -1 & 0 & 7 \\ 8 & -7 & -2 \\ 0 & -4 & 1 \end{bmatrix} \quad |A| = ?$$

question80

$$A = \begin{bmatrix} 1 & 2 & -10 \\ -8 & 0 & 4 \\ 3 & -10 & -5 \end{bmatrix} \quad |A| = ?$$

question81

$$A = \begin{bmatrix} 9 & -8 & -1 \\ -7 & 5 & 8 \\ -8 & -5 & 1 \end{bmatrix} \quad |A| = ?$$

question82

$$A = \begin{bmatrix} 4 & -5 & -2 \\ -9 & 3 & -1 \\ -4 & 3 & -4 \end{bmatrix} \quad |A| = ?$$

question83

$$A = \begin{bmatrix} 0 & -2 & 0 \\ -1 & -2 & 9 \\ 8 & 7 & -1 \end{bmatrix} \quad |A| = ?$$

question84

$$A = \begin{bmatrix} 1 & 2 & 8 \\ -7 & -2 & -4 \\ 5 & 1 & 6 \end{bmatrix} \quad |A| = ?$$

question85

$$A = \begin{bmatrix} 0 & 2 & -10 \\ -2 & 1 & -5 \\ 4 & -10 & -5 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 4 & -4 & -8 \\ 9 & 5 & 7 \\ -8 & -7 & -4 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 7 & -8 & 8 \\ -2 & -1 & 7 \\ 0 & -1 & -6 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -3 & 7 & -8 \\ -1 & -10 & 7 \\ -4 & -5 & 8 \end{bmatrix} \quad |A| = ?$$

question89

$$A = \begin{bmatrix} -8 & -3 & -7 \\ -4 & -7 & 1 \\ -4 & 4 & 9 \end{bmatrix} \quad |A| = ?$$

question90

$$A = \begin{bmatrix} 6 & 9 & -9 \\ -10 & 6 & -2 \\ -7 & 2 & 8 \end{bmatrix} \quad |A| = ?$$

question91

$$A = \begin{bmatrix} 6 & -1 & 2 \\ 9 & 6 & -2 \\ -9 & -3 & 9 \end{bmatrix} \quad |A| = ?$$

question92

$$A = \begin{bmatrix} -3 & 7 & -10 \\ 2 & -9 & 2 \\ 3 & 4 & -1 \end{bmatrix} \quad |A| = ?$$

question93

$$A = \begin{bmatrix} 0 & 1 & -1 \\ -5 & 1 & -6 \\ 2 & 1 & 2 \end{bmatrix} \quad |A| = ?$$

question94

$$A = \begin{bmatrix} -6 & 4 & -9 \\ 6 & 6 & -5 \\ -9 & -8 & 0 \end{bmatrix} \quad |A| = ?$$

question95

$$A = \begin{bmatrix} 5 & 8 & 4 \\ -9 & 7 & -4 \\ 0 & -3 & -1 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -10 & 5 & 9 \\ -9 & -4 & 3 \\ -10 & 6 & 0 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -8 & 4 & -3 \\ 9 & 6 & -9 \\ 6 & -9 & -9 \end{bmatrix} \quad |A| = ?$$

question98

$$A = \begin{bmatrix} 9 & 2 & 7 \\ 0 & 5 & -7 \\ 8 & -10 & 4 \end{bmatrix} \quad |A| = ?$$

question99

$$A = \begin{bmatrix} 6 & -8 & 9 \\ -7 & 7 & -3 \\ -5 & -4 & 4 \end{bmatrix} \quad |A| = ?$$

question100

$$A = \begin{bmatrix} -5 & 4 & -6 \\ 8 & 2 & -7 \\ 3 & -7 & -6 \end{bmatrix} \quad |A| = ?$$

question101

$$A = \begin{bmatrix} -5 & 3 & 5 & -2 \\ -9 & -6 & -8 & -6 \\ -5 & 9 & -6 & -1 \\ -7 & -9 & -6 & 7 \end{bmatrix} \quad |A| = ?$$

question102

$$A = \begin{bmatrix} -6 & 6 & -1 & 5 \\ 4 & -8 & 9 & 4 \\ 8 & 2 & 1 & 2 \\ 6 & 8 & 0 & 9 \end{bmatrix} \quad |A| = ?$$

question103

$$A = \begin{bmatrix} 0 & -4 & -10 & 9 \\ 9 & 6 & -3 & 1 \\ 5 & 1 & -2 & 8 \\ 4 & 2 & 1 & -6 \end{bmatrix} \quad |A| = ?$$

question104

$$A = \begin{bmatrix} 8 & 7 & 5 & -3 \\ -6 & 5 & -4 & 2 \\ 6 & -3 & -6 & -10 \\ 8 & 7 & -3 & 7 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -3 & -3 & 9 & -7 \\ -6 & -3 & 0 & 9 \\ 0 & -2 & -5 & -2 \\ -10 & -2 & 0 & -7 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 2 & 9 & 7 & -2 \\ 6 & -4 & -8 & 9 \\ 6 & -8 & -2 & 5 \\ -1 & 6 & 8 & 3 \end{bmatrix} \quad |A| = ?$$

question107

$$A = \begin{bmatrix} -3 & 6 & -8 & 2\\ 3 & -2 & 4 & 8\\ -2 & -2 & -2 & 2\\ -5 & 1 & 9 & -5 \end{bmatrix} \quad |A| = ?$$

question108

$$A = \begin{bmatrix} 3 & -3 & -2 & -6 \\ 7 & 7 & -5 & 7 \\ 8 & -5 & -10 & 7 \\ 5 & -7 & 2 & -4 \end{bmatrix} \quad |A| = ?$$

question109

$$A = \begin{bmatrix} 8 & -8 & -5 & -2 \\ 4 & 5 & -6 & 4 \\ 7 & 4 & -9 & -6 \\ 4 & -10 & -7 & -10 \end{bmatrix} \quad |A| = ?$$

question110

$$A = \begin{bmatrix} 6 & 0 & -4 & 9 \\ -2 & -3 & -7 & -9 \\ 4 & -4 & -10 & -1 \\ -4 & 7 & -7 & -8 \end{bmatrix} \quad |A| = ?$$

question111

$$A = \begin{bmatrix} 4 & 5 & -3 & -9 \\ 5 & -2 & 2 & 4 \\ 5 & -9 & 6 & 2 \\ 1 & -7 & -1 & 5 \end{bmatrix} \quad |A| = ?$$

question112

$$A = \begin{bmatrix} 7 & -9 & -8 & 4 \\ -6 & 9 & -9 & -6 \\ -9 & -1 & 6 & -4 \\ 8 & -4 & -7 & 8 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -7 & -10 & 4 & 2 \\ -3 & 4 & 3 & -3 \\ 6 & -7 & 8 & -6 \\ -2 & -5 & -2 & -5 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 4 & 0 & 6 & -1 \\ -9 & -10 & -4 & -8 \\ 6 & 8 & -9 & 0 \\ 8 & 1 & 0 & 6 \end{bmatrix} \quad |A| = ?$$

question115

$$A = \begin{bmatrix} -2 & 8 & 9 & -4 \\ -9 & -6 & 0 & -10 \\ -5 & 0 & 8 & -2 \\ -8 & -7 & 6 & -9 \end{bmatrix} \quad |A| = ?$$

question116

$$A = \begin{bmatrix} -5 & 6 & 5 & -2 \\ 2 & 2 & 1 & -9 \\ 9 & 7 & 9 & -1 \\ 8 & -3 & 2 & -10 \end{bmatrix} \quad |A| = ?$$

question117

$$A = \begin{bmatrix} -10 & -3 & 7 & 1 \\ -8 & -3 & -3 & -7 \\ 1 & -4 & -10 & 1 \\ 6 & 3 & -4 & -6 \end{bmatrix} \quad |A| = ?$$

question118

$$A = \begin{bmatrix} 1 & -3 & -7 & 1 \\ -1 & 6 & 3 & 0 \\ -8 & 6 & 2 & -7 \\ -2 & -5 & 3 & -9 \end{bmatrix} \quad |A| = ?$$

question119

$$A = \begin{bmatrix} 8 & 7 & 7 & 4 \\ -5 & -4 & -9 & -2 \\ -3 & -4 & -8 & 7 \\ -2 & 1 & -5 & -7 \end{bmatrix} \quad |A| = ?$$

question120

$$A = \begin{bmatrix} -8 & -2 & 5 & 7 \\ 2 & 0 & 1 & 2 \\ -6 & -9 & -10 & 4 \\ -3 & 3 & -1 & -4 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 8 & 2 & -2 & -1 \\ 5 & 7 & 3 & -8 \\ 5 & 5 & 5 & -4 \\ -3 & -4 & 6 & 4 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 5 & 5 & -4 & 3 \\ -9 & -9 & 5 & 5 \\ 5 & -1 & -4 & 8 \\ 9 & -10 & 4 & -5 \end{bmatrix} \quad |A| = ?$$

question123

$$A = \begin{bmatrix} 1 & 8 & 4 & -9 \\ 8 & -1 & -10 & 2 \\ 6 & -1 & 3 & -10 \\ 1 & 1 & 8 & -10 \end{bmatrix} \quad |A| = ?$$

question124

$$A = \begin{bmatrix} 5 & 0 & 4 & -1 \\ 7 & 8 & -2 & 7 \\ -7 & -9 & -6 & 4 \\ -4 & 0 & -6 & -3 \end{bmatrix} \quad |A| = ?$$

question125

$$A = \begin{bmatrix} 9 & 6 & 7 & 7 \\ -9 & 7 & 9 & -1 \\ 7 & 4 & 3 & -5 \\ 2 & 2 & -6 & -10 \end{bmatrix} \quad |A| = ?$$

question126

$$A = \begin{bmatrix} -5 & -3 & 3 & 1 \\ -2 & 3 & -2 & 6 \\ 1 & -4 & -10 & 3 \\ -7 & 4 & 7 & -10 \end{bmatrix} \quad |A| = ?$$

question127

$$A = \begin{bmatrix} -4 & -8 & 0 & 8 \\ 7 & -2 & 2 & 0 \\ -10 & 6 & -10 & 2 \\ -4 & 3 & -1 & 0 \end{bmatrix} \quad |A| = ?$$

question128

$$A = \begin{bmatrix} -6 & 1 & 7 & -1 \\ 9 & 0 & -10 & 0 \\ 6 & -7 & 0 & 0 \\ -4 & -10 & -1 & 9 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 3 & 7 & -5 & -1 \\ -2 & 1 & -5 & 4 \\ 8 & 5 & 9 & -10 \\ 9 & -8 & -1 & 8 \end{bmatrix} \quad |A| = ?$$

 ${\bf question 130}$

$$A = \begin{bmatrix} -8 & -9 & 3 & -4 \\ 7 & 5 & -9 & 5 \\ 3 & -7 & 6 & -9 \\ 4 & 2 & -6 & -1 \end{bmatrix} \quad |A| = ?$$

question131

$$A = \begin{bmatrix} -8 & -3 & -8 & -3 \\ -9 & 2 & 2 & 0 \\ -10 & 6 & -9 & 9 \\ 1 & -10 & 0 & 0 \end{bmatrix} \quad |A| = ?$$

question132

$$A = \begin{bmatrix} 7 & 4 & 1 & -8 \\ -7 & 7 & -9 & 4 \\ -10 & -7 & -2 & 6 \\ -2 & 4 & -8 & 9 \end{bmatrix} \quad |A| = ?$$

question133

$$A = \begin{bmatrix} -3 & 1 & -9 & 6 \\ 3 & -2 & 1 & 0 \\ 4 & -8 & -2 & 2 \\ 2 & -3 & -7 & -4 \end{bmatrix} \quad |A| = ?$$

question134

$$A = \begin{bmatrix} -7 & 9 & 4 & -6 \\ 5 & -3 & -8 & -7 \\ -2 & 4 & -2 & -3 \\ 3 & 5 & 8 & 3 \end{bmatrix} \quad |A| = ?$$

question135

$$A = \begin{bmatrix} 5 & 5 & 1 & 9 \\ 9 & 7 & 4 & 4 \\ 8 & 3 & 7 & 8 \\ 6 & 7 & -8 & -7 \end{bmatrix} \quad |A| = ?$$

question136

$$A = \begin{bmatrix} -2 & 6 & 9 & 5 \\ -7 & 4 & -2 & -1 \\ -2 & -1 & -10 & -7 \\ -3 & -3 & 2 & -8 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 8 & -1 & 5 & 9 \\ -10 & -7 & 6 & 5 \\ 9 & 7 & 7 & -10 \\ -9 & -8 & 4 & 5 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -2 & 4 & 7 & -1 \\ 4 & 7 & 5 & 8 \\ 7 & 7 & 3 & 4 \\ 3 & 6 & 9 & 8 \end{bmatrix} \quad |A| = ?$$

question139

$$A = \begin{bmatrix} 8 & -5 & -10 & -2 \\ -5 & -8 & -7 & -3 \\ 9 & 3 & -8 & 2 \\ 3 & -3 & 9 & 0 \end{bmatrix} \quad |A| = ?$$

question140

$$A = \begin{bmatrix} -3 & -6 & -4 & -7 \\ 2 & 9 & -7 & 6 \\ 3 & -7 & -8 & 7 \\ -6 & -10 & -4 & -3 \end{bmatrix} \quad |A| = ?$$

question141

$$A = \begin{bmatrix} -3 & -4 & -1 & 0 \\ 2 & -9 & -8 & 7 \\ -7 & -2 & 4 & 5 \\ 4 & -5 & -1 & 2 \end{bmatrix} \quad |A| = ?$$

question142

$$A = \begin{bmatrix} 5 & -10 & -1 & 3 \\ 9 & -1 & -2 & 4 \\ 7 & -4 & 2 & 0 \\ 5 & -3 & -10 & -9 \end{bmatrix} \quad |A| = ?$$

question143

$$A = \begin{bmatrix} 6 & 6 & 5 & -2 \\ -1 & -9 & 1 & -8 \\ -4 & -3 & -5 & 5 \\ 5 & -1 & 7 & -5 \end{bmatrix} \quad |A| = ?$$

question144

$$A = \begin{bmatrix} -1 & -3 & 8 & 3 \\ -8 & -3 & 4 & 9 \\ 8 & 2 & 5 & -7 \\ 0 & -8 & -8 & 0 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 4 & -7 & -9 & 3 \\ -4 & -5 & 9 & -5 \\ -3 & 3 & -2 & -6 \\ 7 & 6 & 0 & -7 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} -6 & 8 & 5 & -8 \\ 3 & -6 & 3 & -7 \\ 9 & -2 & 6 & -2 \\ 8 & 6 & 6 & 2 \end{bmatrix} \quad |A| = ?$$

question147

$$A = \begin{bmatrix} -6 & 3 & -1 & 4 \\ -4 & 8 & 5 & -4 \\ -7 & -9 & -1 & 4 \\ -1 & -9 & 7 & -10 \end{bmatrix} \quad |A| = ?$$

question148

$$A = \begin{bmatrix} -3 & -8 & 0 & -8 \\ 2 & 4 & 7 & -1 \\ 8 & -1 & -5 & -7 \\ -5 & 8 & -4 & 6 \end{bmatrix} \quad |A| = ?$$

question149

$$A = \begin{bmatrix} -8 & -8 & -8 & -6 \\ 0 & -2 & 8 & 7 \\ 8 & 0 & 6 & -2 \\ 2 & 8 & 5 & 2 \end{bmatrix} \quad |A| = ?$$

$$A = \begin{bmatrix} 0 & -6 & -6 & -1 \\ 6 & 1 & 1 & -1 \\ 2 & -9 & -5 & -7 \\ 9 & 4 & 7 & 7 \end{bmatrix} \quad |A| = ?$$