

EduSahara™ Learning Center Assignment**Grade : Class X, ICSE****Chapter : Matrices****Name : Order of Matrix**

1. The order of matrix $A = \begin{bmatrix} -3 \\ 4 \\ 5 \end{bmatrix}$ is

(i) 3×2 (ii) 1×3 (iii) 3×1 (iv) 4×1 (v) 2×1

2. The order of matrix $A = \begin{bmatrix} 4 \\ -2 \end{bmatrix}$ is

(i) 2×1 (ii) 3×1 (iii) 2×2 (iv) 1×2 (v) 1×1

3. The order of matrix $A = \begin{bmatrix} 1 & -5 \end{bmatrix}$ is

(i) 2×2 (ii) 2×1 (iii) 1×3 (iv) 2×3 (v) 1×2

4. The order of matrix $A = \begin{bmatrix} 2 & -5 & -5 \end{bmatrix}$ is

(i) 2×4 (ii) 3×1 (iii) 2×3 (iv) 1×4 (v) 1×3

5. The order of matrix $A = \begin{bmatrix} 0 & 4 \\ -5 & -2 \end{bmatrix}$ is

(i) 2×2 (ii) 2×3 (iii) 2×1 (iv) 3×2 (v) 1×2

6. The order of matrix $A = \begin{bmatrix} -1 & -5 & 5 \\ -5 & 1 & 4 \end{bmatrix}$ is

(i) 3×2 (ii) 2×3 (iii) 1×3 (iv) 3×3 (v) 2×4

7. The order of matrix $A = \begin{bmatrix} -5 & -1 \\ -5 & 3 \\ -3 & 1 \end{bmatrix}$ is

(i) 3×2 (ii) 2×2 (iii) 3×3 (iv) 2×3 (v) 4×2

8. The order of matrix $A = \begin{bmatrix} -5 & 0 & 4 \end{bmatrix}$ is

$$\begin{bmatrix} 4 & -4 & -5 \\ 0 & -5 & 3 \end{bmatrix}$$

- (i) 3×4 (ii) 3×3 (iii) 3×2 (iv) 2×3 (v) 4×3
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9. A 3×2 matrix has

- a) 2 rows and 3 columns
 b) 3 rows and 6 columns
 c) 3 rows and 2 columns
 d) 5 rows and 2 columns
- (i) {b,c} (ii) {a,c} (iii) {c} (iv) {d,a,c}
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10. Which of the following matrices is a 2×1 matrix ?

- (i) $\begin{bmatrix} 5 \\ 2 \\ 7 \end{bmatrix}$ (ii) $\begin{bmatrix} 1 \\ 7 \end{bmatrix}$ (iii) $\begin{bmatrix} 1 & 9 \\ 7 & 1 \\ 8 & 9 \end{bmatrix}$
- (iv) $\begin{bmatrix} 6 & 2 \\ 7 & 5 \end{bmatrix}$ (v) $\begin{bmatrix} 3 & 8 \end{bmatrix}$
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11. Which of the following matrices is a 1×2 matrix ?

- (i) $\begin{bmatrix} 9 & 8 \end{bmatrix}$ (ii) $\begin{bmatrix} 2 & 2 & 7 \end{bmatrix}$ (iii) $\begin{bmatrix} 1 & 1 & 7 \\ 5 & 8 & 5 \end{bmatrix}$
- (iv) $\begin{bmatrix} 2 \\ 3 \end{bmatrix}$ (v) $\begin{bmatrix} 1 & 4 \\ 5 & 3 \end{bmatrix}$
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12. Which of the following matrices is a 2×2 matrix ?

- (i) $\begin{bmatrix} 7 & 6 \\ 8 & 6 \end{bmatrix}$ (ii) $\begin{bmatrix} 2 & 7 & 6 \\ 2 & 6 & 7 \\ 6 & 7 & 7 \end{bmatrix}$ (iii) $\begin{bmatrix} 1 & 1 \\ 7 & 7 \\ 7 & 5 \end{bmatrix}$
- (iv) $\begin{bmatrix} 2 & 9 & 3 \\ 6 & 8 & 5 \\ 3 & 2 & 1 \end{bmatrix}$ (v) $\begin{bmatrix} 6 & 4 & 5 \\ 4 & 4 & 4 \end{bmatrix}$
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13. Which of the following matrices is a 2×3 matrix ?

- (i) $\begin{bmatrix} 7 & 4 & 2 & 4 \end{bmatrix}$ (ii) $\begin{bmatrix} 8 & 3 & 9 \end{bmatrix}$ (iii) $\begin{bmatrix} 5 & 1 & 5 & 3 \end{bmatrix}$

$$\begin{bmatrix} 9 & 6 & 8 & 1 \end{bmatrix} \quad \begin{bmatrix} 1 & 4 & 1 \\ 4 & 5 & 6 \end{bmatrix} \quad \begin{bmatrix} 3 & 5 & 2 & 3 \\ 4 & 4 & 2 & 5 \end{bmatrix}$$

$$(iv) \begin{bmatrix} 1 & 5 \\ 1 & 1 \\ 4 & 2 \end{bmatrix} \quad (v) \begin{bmatrix} 9 & 2 & 1 \\ 4 & 9 & 6 \end{bmatrix}$$

14. Which of the following matrices is a 3×2 matrix ?

$$(i) \begin{bmatrix} 7 & 9 \\ 2 & 4 \\ 6 & 8 \\ 5 & 8 \end{bmatrix} \quad (ii) \begin{bmatrix} 5 & 8 & 8 \\ 4 & 1 & 3 \end{bmatrix} \quad (iii) \begin{bmatrix} 4 & 5 \\ 3 & 6 \\ 1 & 1 \end{bmatrix}$$

$$(iv) \begin{bmatrix} 8 & 7 & 9 \\ 9 & 2 & 1 \\ 9 & 4 & 2 \end{bmatrix} \quad (v) \begin{bmatrix} 8 & 8 & 9 \\ 3 & 7 & 9 \\ 5 & 8 & 1 \\ 7 & 8 & 4 \end{bmatrix}$$

15. Which of the following matrices is a 3×3 matrix ?

$$(i) \begin{bmatrix} 2 & 5 & 4 & 3 \\ 7 & 5 & 4 & 5 \\ 3 & 9 & 5 & 1 \\ 9 & 3 & 9 & 6 \end{bmatrix} \quad (ii) \begin{bmatrix} 1 & 1 & 6 \\ 1 & 8 & 3 \\ 9 & 2 & 7 \\ 7 & 4 & 5 \end{bmatrix} \quad (iii) \begin{bmatrix} 5 & 1 & 3 & 7 \\ 5 & 9 & 5 & 6 \\ 7 & 7 & 4 & 3 \end{bmatrix}$$

$$(iv) \begin{bmatrix} 9 & 1 & 8 & 4 \\ 1 & 9 & 8 & 5 \\ 8 & 4 & 2 & 3 \\ 1 & 3 & 5 & 3 \end{bmatrix} \quad (v) \begin{bmatrix} 7 & 6 & 7 \\ 4 & 2 & 2 \\ 3 & 1 & 3 \end{bmatrix}$$

16. Which of the following is a square matrix?

$$(i) \begin{bmatrix} 6 & 3 & 2 \\ 8 & 6 & 6 \\ 1 & 4 & 9 \end{bmatrix} \quad (ii) \begin{bmatrix} 4 & 8 & 5 \\ 6 & 4 & 3 \\ 5 & 5 & 2 \\ 5 & 4 & 3 \end{bmatrix} \quad (iii) \begin{bmatrix} 2 & 2 & 2 & 8 \\ 8 & 5 & 9 & 4 \\ 1 & 3 & 3 & 4 \\ 2 & 2 & 5 & 1 \\ 5 & 2 & 8 & 9 \end{bmatrix}$$

$$(iv) \begin{bmatrix} 9 & 3 & 2 & 6 \\ 7 & 8 & 7 & 5 \\ 9 & 5 & 4 & 8 \end{bmatrix} \quad (v) \begin{bmatrix} 1 & 9 & 2 \\ 9 & 9 & 2 \end{bmatrix}$$

17. Which of the following is a rectangular matrix?

$$(i) \begin{bmatrix} 3 & 7 & 9 \\ 2 & 4 & 7 \\ 5 & 9 & 2 \end{bmatrix} \quad (ii) \begin{bmatrix} 2 & 8 \\ 7 & 4 \\ 6 & 7 \end{bmatrix} \quad (iii) \begin{bmatrix} 4 \end{bmatrix}$$

$$(iv) \begin{bmatrix} 1 & 3 & 4 & 4 \\ 7 & 5 & 6 & 8 \\ 5 & 9 & 2 & 3 \\ 9 & 9 & 7 & 3 \end{bmatrix} \quad (v) \begin{bmatrix} 6 & 8 \\ 7 & 5 \end{bmatrix}$$

18. Which of the following is a row matrix

$$(i) \begin{bmatrix} 8 \\ 3 \\ 5 \\ 8 \\ 5 \end{bmatrix} \quad (ii) \begin{bmatrix} 4 \\ 5 \end{bmatrix} \quad (iii) \begin{bmatrix} 5 \\ 1 \\ 1 \\ 8 \end{bmatrix}$$

$$(iv) \begin{bmatrix} 6 & 3 \end{bmatrix} \quad (v) \begin{bmatrix} 4 \\ 6 \\ 6 \end{bmatrix}$$

19. Which of the following is a column matrix

$$(i) \begin{bmatrix} 1 & 9 \end{bmatrix} \quad (ii) \begin{bmatrix} 1 \\ 5 \\ 9 \end{bmatrix} \quad (iii) \begin{bmatrix} 3 & 4 & 3 \end{bmatrix}$$

$$(iv) \begin{bmatrix} 7 & 6 & 3 \\ 5 & 3 & 5 \\ 9 & 1 & 8 \end{bmatrix} \quad (v) \begin{bmatrix} 8 & 5 & 6 & 4 \end{bmatrix}$$

20. If a matrix has 4 elements, what are the possible orders it can have?

$$(i) \{1 \times 4, 4 \times 1\} \quad (ii) \{2 \times 2, 4 \times 1\} \\ (iii) \{1 \times 4, 2 \times 2\} \quad (iv) \{1 \times 4, 2 \times 2, 4 \times 1\}$$

Assignment Key

- 1) (iii)
- 2) (i)
- 3) (v)
- 4) (v)
- 5) (i)
- 6) (ii)
- 7) (i)
- 8) (ii)
- 9) (iii)
- 10) (ii)
- 11) (i)
- 12) (i)
- 13) (v)
- 14) (iii)
- 15) (v)
- 16) (i)
- 17) (ii)
- 18) (iv)
- 19) (ii)
- 20) (iv)