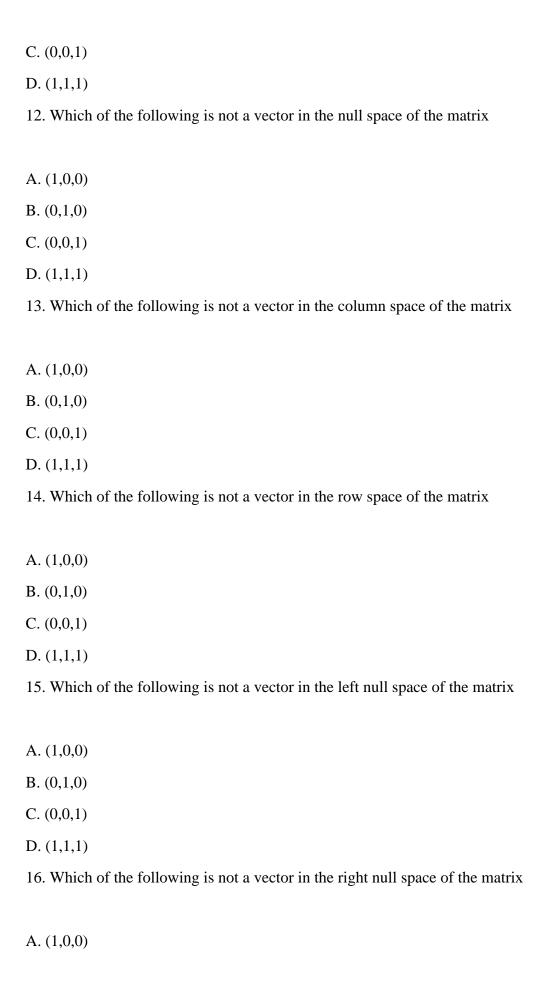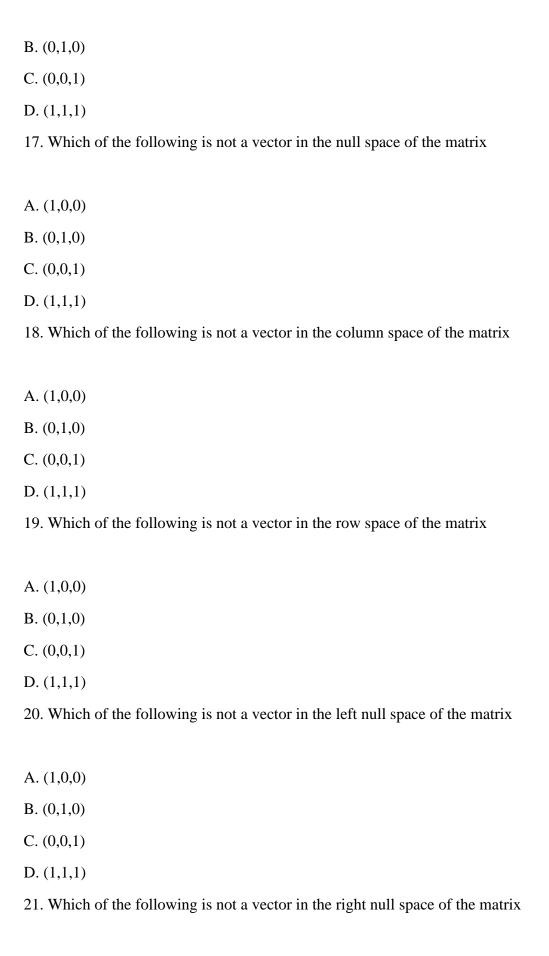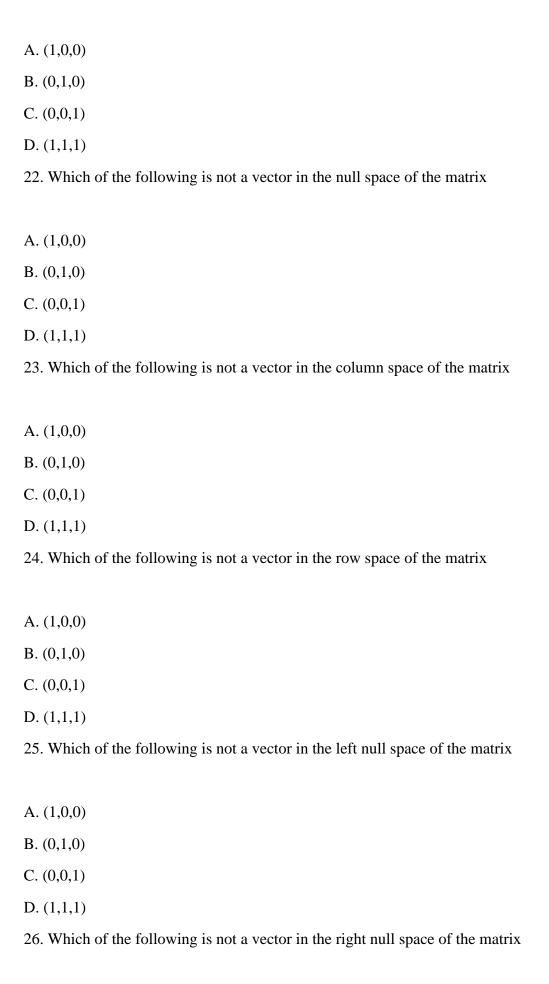1. Which of the following is not a vector space?

A. The set of all real numbers

B. The set of all polynomials

C. The set of all matrices

D. The set of all vectors

2. Which of the following is not a subspace of R3?

A. The set of all vectors with zero first coordinate

B. The set of all vectors with zero second coordinate

C. The set of all vectors with zero third coordinate

D. The set of all vectors with zero first and second coordinates

3. Which of the following is not a basis for R3?

A. (1,0,0), (0,1,0), (0,0,1)

B. (1,1,0), (1,0,1), (0,1,1)

C. (2,0,0), (0,2,0), (0,0,2)

D. (1,2,3), (4,5,6), (7,8,9)

4. Which of the following is not a vector in R3?

A. (1,2,3)

B. (4,5,6)

C. (7,8,9)

D. (10,11,12)

5. Which of the following is not a linear combination of (1,2,3) and (4,5,6)?

A. (1,4,7)

B. (2,5,8)

C. (3,6,9)

D. (10,11,12)

6. Which of the following is not a vector in the span of (1,2,3) and (4,5,6)?

A. (1,4,7)

B. (2,5,8)

C. (3,6,9)

D. (0,0,0)

7. Which of the following is not a vector in the null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

8. Which of the following is not a vector in the column space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

9. Which of the following is not a vector in the row space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

10. Which of the following is not a vector in the left null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

11. Which of the following is not a vector in the right null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

12. Which of the following is not a vector in the null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

13. Which of the following is not a vector in the column space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

14. Which of the following is not a vector in the row space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

15. Which of the following is not a vector in the left null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

16. Which of the following is not a vector in the right null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

17. Which of the following is not a vector in the null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

18. Which of the following is not a vector in the column space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

19. Which of the following is not a vector in the row space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

20. Which of the following is not a vector in the left null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

21. Which of the following is not a vector in the right null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

22. Which of the following is not a vector in the null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

23. Which of the following is not a vector in the column space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

24. Which of the following is not a vector in the row space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

25. Which of the following is not a vector in the left null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

26. Which of the following is not a vector in the right null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

27. Which of the following is not a vector in the null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

28. Which of the following is not a vector in the column space of the matrix

A. (1,0,0)
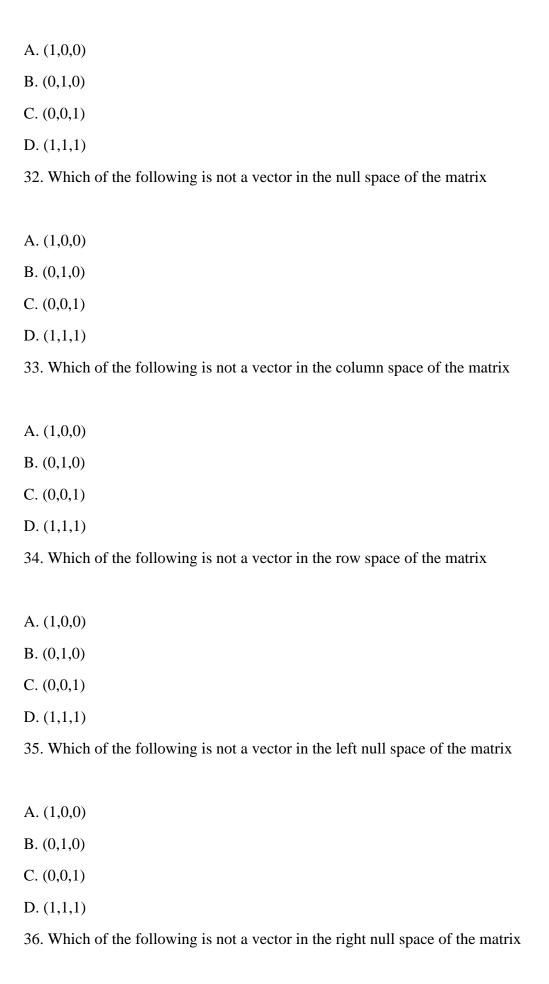
B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

29. Which of the following is not a vector in the row space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

30. Which of the following is not a vector in the left null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

31. Which of the following is not a vector in the right null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

32. Which of the following is not a vector in the null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

33. Which of the following is not a vector in the column space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

34. Which of the following is not a vector in the row space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

35. Which of the following is not a vector in the left null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

36. Which of the following is not a vector in the right null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

37. Which of the following is not a vector in the null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

38. Which of the following is not a vector in the column space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

39. Which of the following is not a vector in the row space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

40. Which of the following is not a vector in the left null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

41. Which of the following is not a vector in the right null space of the matrix
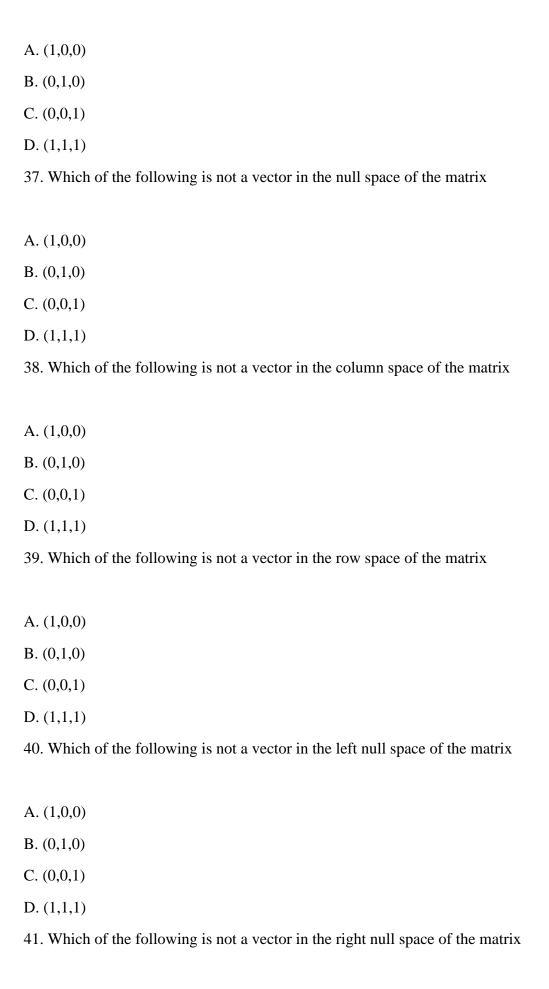
A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

42. Which of the following is not a vector in the null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

43. Which of the following is not a vector in the column space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

44. Which of the following is not a vector in the row space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

45. Which of the following is not a vector in the left null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

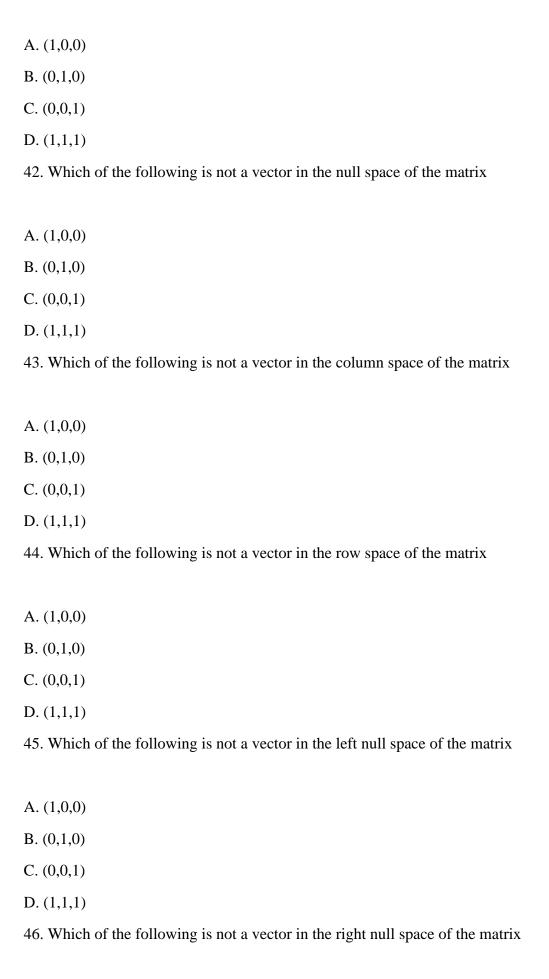46. Which of the following is not a vector in the right null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

47. Which of the following is not a vector in the null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

48. Which of the following is not a vector in the column space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

49. Which of the following is not a vector in the row space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

50. Which of the following is not a vector in the left null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

51. Which of the following is not a vector in the right null space of the matrix
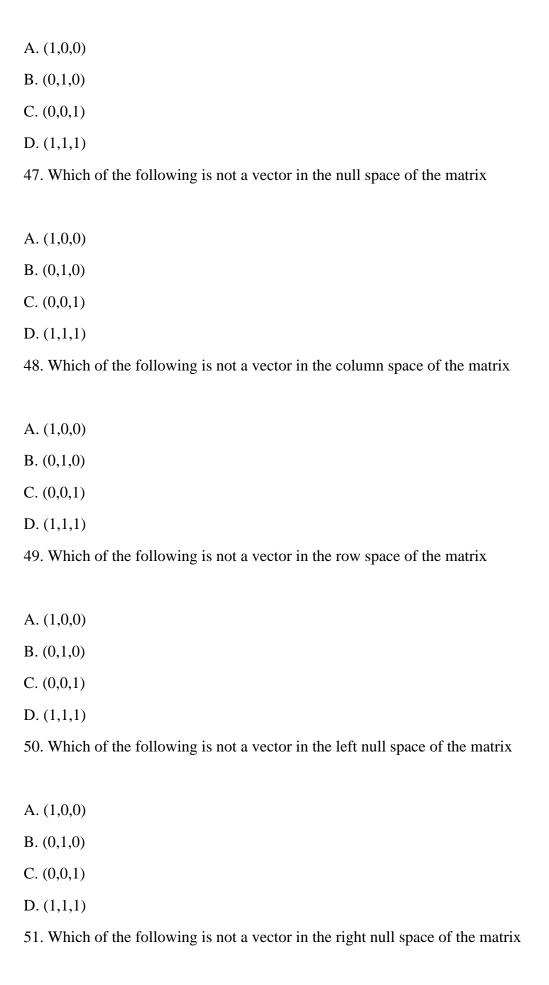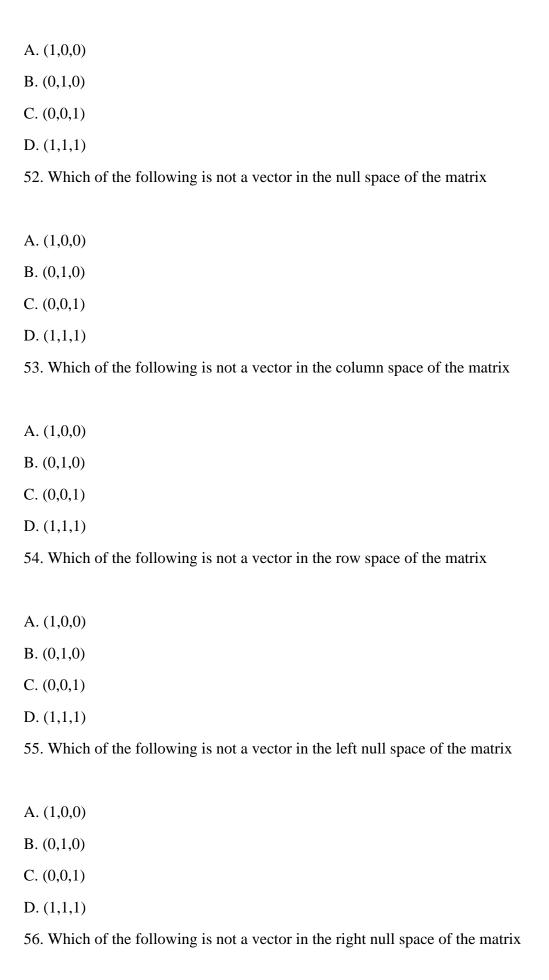
A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

52. Which of the following is not a vector in the null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

53. Which of the following is not a vector in the column space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

54. Which of the following is not a vector in the row space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

55. Which of the following is not a vector in the left null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

56. Which of the following is not a vector in the right null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

57. Which of the following is not a vector in the null space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)

58. Which of the following is not a vector in the column space of the matrix

A. (1,0,0)

B. (0,1,0)

C. (0,0,1)

D. (1,1,1)