**Chapter 4.2**

1.

Auxiliary equation:

3.

Auxiliary equation:

5.

Auxiliary equation:

7.

Auxiliary equation:

9.

Auxiliary equation:

11.

Auxiliary equation:

13.

Auxiliary equation:

is a solution.

15.

Auxiliary equation:

17.

Auxiliary equation:

19.

Auxiliary equation:

21.

Auxiliary equation:

is a solution.

23.

Auxiliary equation:

25.

Auxiliary equation:

27.

Auxiliary equation:

29.

Auxiliary equation:

31.

Auxiliary equation:

33.

Auxiliary equation:

35.

Auxiliary equation:

37.

Auxiliary equation:

39.

Auxiliary equation:

41.

Auxiliary equation:

is a solution.

43.

45.

Auxiliary equation:

is a solution.

is also a solution.

**Chapter 4.3**

1.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

3.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

5.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

7.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

9.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

11.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

13.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

Set contains repetitions.

15.

Corresponding homogenous equation:

Auxiliary equation:

is a root.

U.C. Function:

U.C. Set:

contains a repetition.

17.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

Sets contain repetitions.

19.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

Set contain repetitions.

21.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

The set contains repetitions.

23.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Functions:

U.C. Set:

Sets contain repetitions.

Set contains repetitions.

25.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

27.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

29.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

31.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Functions:

U.C. Set:

33.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C Set:

35.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

Set contains repetitions.

Set contains repetitions.

37.

Corresponding homogeneous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

Set contains repetitions.

39.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

41.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

43.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Functions:

U.C. Sets:

Set contains repetitions.

45.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

Set contains repetitions.

47.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

Set contains repetitions.

Set contains repetitions.

Set contains repetitions.

49.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

Sets contain repetition.

51.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

The set contains repetitions.

The set contains repetitions.

53.

Corresponding homogenous equation:

Auxiliary equation:

U.C. Function:

U.C. Set:

Sets contain repetitions.