Problem

Examine the following formal descriptions of sets so that you understand which members they contain. Write a short informal English description of each set.

a. {1, 3, 5, 7, . . . }

b. { . . . ,–4,–2, 0, 2, 4, . . . }

c. {n| n = 2m for some m in N}

d. {n| n = 2m for some m in N, and n = 3k for some k in N}

e. {w| w is a string of 0s and 1s and w equals the reverse of w}

f. {n| n is an integer and n = n + 1}

Step-by-step solution

Step 1 of 5

a)

A set of all odd natural numbers.

b)

A set of all even integers.

Comment

Step 2 of 5

c)

A set of all even natural numbers.

(or) A set of all natural numbers divisible by 2.

Comment

Step 3 of 5

d)

A set of all natural numbers, divisible by both 2 and 3.

(or) A set of all natural multiples of 6.

Comment

Step 4 of 5

e)

The set of all strings comprising of 0's and 1's and every string is a palindrome.

Comment

Step 5 of 5

f)

The set of all integers that are equal to one added to that number.