

**CLASS 7****WORKSHEET#3****CH:SETS**

Q1 . Write each of the following sets in set builder form.

i.  $A=\{4,6,8,9,10,12,14,15,16,18\}$

Ans:

$$\{x:x \text{ is a composite no.}, 1 < x < 20\}$$

$$\{x:x \text{ is a even no.}\}$$

ii.  $B=\{1,2,3,5,6,10,15,30\}$

Ans:

$$\{x:x \text{ is a prime no. less than } 30\}$$

$$\{x:x \text{ is a factor of } 30\}$$

iii.  $C=\{-6,-4,-2,0,2,4,6,8,10\}$

Ans:

$$\{x:x = 2n, n \text{ belong to Integers, } -4 < x < 6\}$$

$$\{x:x \text{ is a multiple of } 2\}$$

iv.  $D=\{\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \dots, \frac{8}{9}\}$

Ans:

$$\{x:x = n/n+1, n \text{ belong to } N, 1 \leq n \leq 8\}$$

$$\{x:x = n/n, n \text{ belong to } N, 1 \leq n \leq 80\}$$

v.  $E=\{\frac{1}{3}, \frac{1}{5}, \frac{1}{7}, \frac{1}{11}, \frac{1}{13}, \frac{1}{19}\}$

Ans:

$$\{x:x = 1/n, n \text{ belong to prime, } 2 < n < 20\}$$

$$\{x:x = 1/n+1, n \text{ belong to prime, } 2 < n < 20\}$$

vi.  $F=\{\text{May, June, July August, September}\}$

Ans:

$$\{x:x \text{ is a month of year having } 30 \text{ days}\}$$

$$\{x:x \text{ is a month of year}\}$$

**CLASS 7****WORKSHEET# 4****CH:SETS**

Q1. Identify whether the given pair consist of equal or equivalent but not equal sets or none:

i. A=Set of letters of the word 'FLOWER'.

B= Set of letters of the word 'FOLLOWER'

<b>Equivalent set</b>	<b>Equal set</b>
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ii. C={x:x belongs to N,  $x+5=6$ }

D={x:x belongs to W,  $x<1$ }

<b>Equivalent set</b>	<b>Equal set</b>
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iii. E= Set of first five whole numbers.

F= Set of first five Natural numbers

<b>Equivalent set</b>	<b>Equal set</b>
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iv. G={a,b,c}

H={x,y,z}

<b>Equivalent set</b>	<b>Equal set</b>
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v. J={x:x belong to N, Xis not equal to x}

K={x:x belong to N ,  $6 < x < 7$ }

<b>Equivalent set</b>	<b>Equal set</b>
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Q1. For each of the following pairs of sets, identify the disjoint and overlapping sets:

- i.  $A = \{x : x \text{ is a prime number, } x < 8\}$   
 $B = \{x : x \text{ is an even natural number, } x < 8\}$

DISJOINT SET	OVERLAPPING SET
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- ii.  $C = \{x : x \text{ belong to } N, x < 10\}$   
 $D = \{x : x \text{ belong to } N, x \text{ is a multiple of } 5\}$

DISJOINT SET	OVERLAPPING SET
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- iii  $E = \{x : x = 4n, n \text{ belong } N\}$   
 $F = \{x : x = 9n, n \text{ belong to } N\}$

DISJOINT SET	OVERLAPPING SET
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- iv.  $G = \{x : x = 8n, n \text{ belong to } N \text{ and } n < 7\}$   
 $H = \{x : x = 9n, n \text{ belong to } N \text{ and } n < 7\}$

DISJOINT SET	OVERLAPPING SET
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