# **Mirror and Water Image**

# Objective

• Students will learn how different objects are seen when they get reflected both in Mirror and in Water.

# Introduction

The reflection of object into the mirror is called its mirror image. It is obtained by inverting an object laterally. If we combine the original figure and mirror image together they form symmetry.

	Mirror Image														
Mirror Images of Capital letters															
	Α	Α	н	н	0	0	v	V							
	В	в	Ι	Ι	Р	Р	W	$\mathbf{W}$							
	$\mathbf{C}$	С	J	L	Q	Q	Х	X							
	D	Δ	К	К	R	я	Y	Y							
	$\mathbf{E}$	ञ	$\mathbf{L}$	Г	S	S	$\mathbf{Z}$	Ζ							
	$\mathbf{F}$	ч	Μ	$\mathbf{M}$	Т	Т									
	G	G	Ν	N	U	$\mathbf{U}$									

• The capital letters which have the same mirror images are:

A, H, I, M, O, T, U, V, W, X, Y

Mirror Images of Small letters

а	а	n	n
b	ď	0	0
с	С	р	q
d	d	q	р
е	9	r	r
f	f	s	в
g	8	t	t
h	h	u	u
i	i	v	v
j	i	w	w
k	k	x	х
-1	1	У	У
m	m	Z	Z

• The small letters which have the same mirror images are:

Mirror Images of Numbers

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15

• 0 and 8 numbers have the same mirror images.

Mirror Image of Clock Time

For mirror image of clock time, the given time shall be subtracted from 12.00 or 11.60.

# Example 1

What will be the mirror image of clock time 3:40?

# Explanation:

By using simple trick

11:60 <u>3: 40</u> 8: 20

#### Water Images

### Introduction

The reflection of an object into the water is called its water image. It is obtained by inverting an object vertically.

**Technical Definition** 

In water image (horizontal), the LOWER and UPPER parts interchange positions and the LEFT and RIGHT parts remain constant.

Water Images of Capital Letters

Α	В	С	D	$\mathbf{E}_{i}$	F	G	н	Ι	J	K	L	M	N	0	Р	Q	R	S	т	U	v	W	X	Y	$\mathbf{Z}$
А	B	С	D	Е	F	G	H	I	า	K	Г	M	N	0	Ь	Q	R	S	$\mathbf{T}$	n	Λ	W	X	Y	Z
Water Images	of	Sm	all I	Let	ters	5																			
				a	-	b			c			d		е		f			g		h				
				a		р			C			q		6		f			g		h	87			
				i		j			k			1		m		n			0		р				
				i		j			k			I		m		IJ	ſ		0		b	G.			
				q		r			s			t		u		v	•		w		x				
				đ		L			s			t		n		Λ			w		x				
				у		z																			
				У		Z							87 11												
Water Images	of	Nu	mbe	ers																					
							1	g	2	3		4	5	6	7	8		9							
							1		2	3	•	4	5	6	7	8	i	Э							
Water Images	of	Clo	ck '	Tim	ne																				

For water image of clock time, the given time shall be subtracted from 18: 30.

# Example 2

What will be the water image of clock time 4: 20?

# Explanation:

By using simple trick

18:30 4:20 14:10 14: 10 means 2: 10

# Points to be Remembered

There is a short trick which can be applied while doing this exercise.

• Certain alphabets in capital form have the mirror image as well as the water image are the same. They are

Η Ι Ο Х

• Some alphabets have similar water reflection i.e.

C D E H 10 X

- Two numbers 0 and 8 have their water images exactly the same. •
- The mirror image of number 6 is the same as the water image of number 9.

# Example 1

Choose the mirror image of the following combination of alphabets from the four alternatives given mirror below.

**Ans**. (c)

**Explanation**: The correct mirror image is as shown below:



#### Example 2

Choose the correct mirror image for the given image.



#### Ans.(d)

**Explanation**: The correct mirror image of the given image is as shown below:



#### **Example 3**

Given below is a set of alphabets along with its four alternatives. Now, identify the correct option which resembles the exact water image of the given combination.



Ans.(b)

Explanation:

# Pynkrai bynkrai

#### Example 4

In the question given below, choose the correct option for the water image from the four given alternatives



Ans. (c)

#### Explanation:



#### Example 5:

In the question there is a combination of small letter alphabets and numbers Choose the correct mirror image of the following combination.

