Computer Animation: Design Of Animation Sequence

CONTENTS

1) Inroduction
2) Applications
3) Design of animation sequence
4) Storyboard Layout
5) Object Definitions
6) Frames
7) Key Frame
8) In-between
9) Raster Animation
10) General Computer Animation Functions

INTRODUCTION

➢ Computer Animation is the process used for generating animated images using computer graphics.

➢ Animators are artists who specialize in the creation of animation.

➢ From Latin amatio, "the act of bringing to life"; from animo("to animate" or "give life to ") and –atio ("the act of").
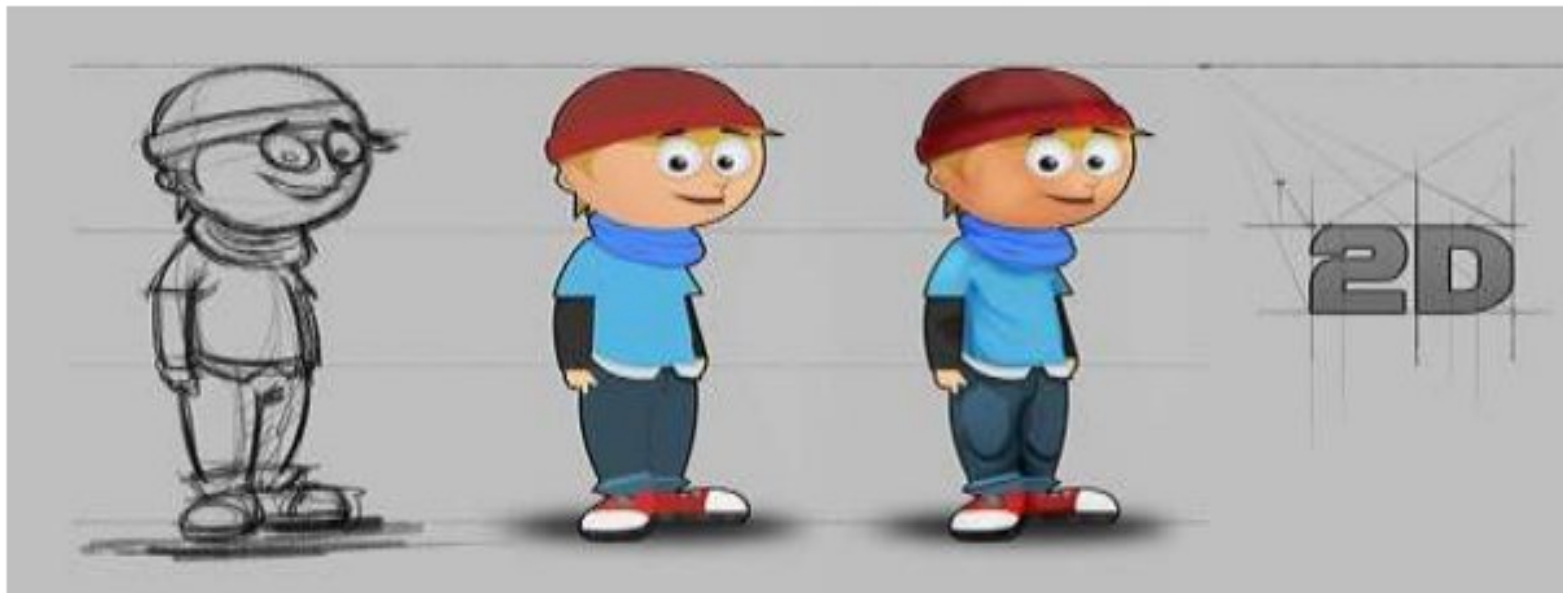
2D Animation
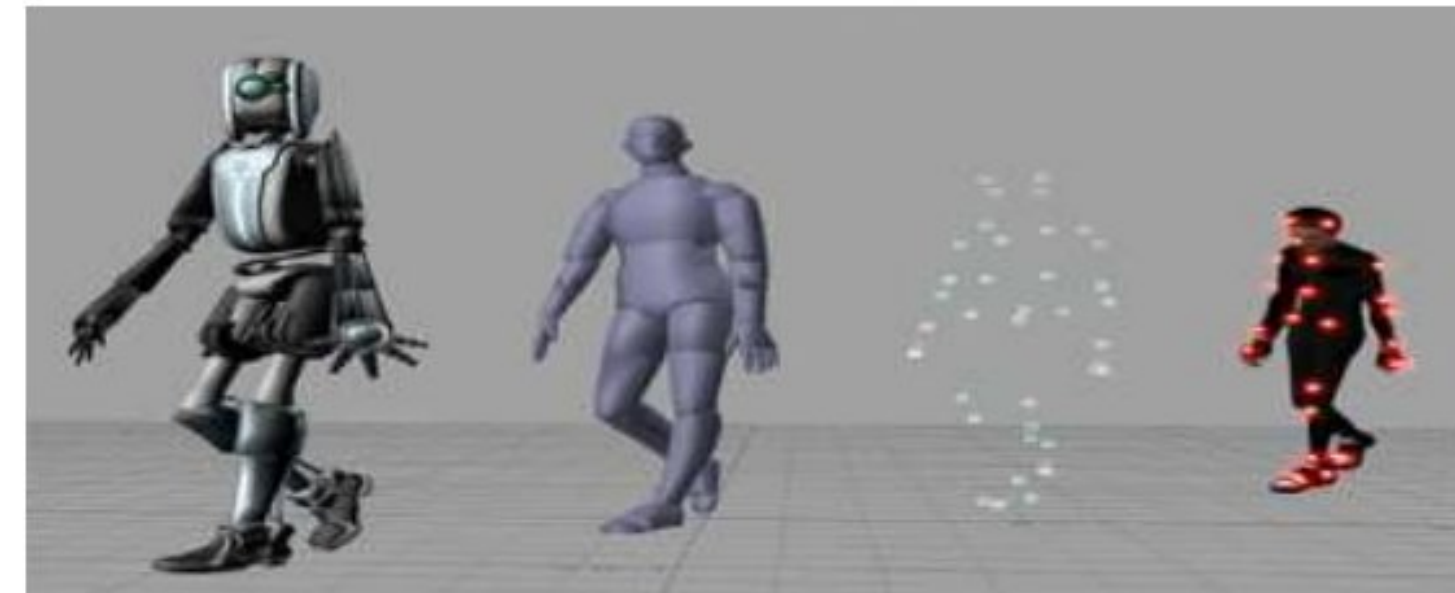
3D Animation

APPLICATIONS

Video Games

Cartoon

Mobile Phones

4

DESIGN OF ANIMATION SEQUNCE

Steps for designing animation sequence

- Storyboard Layout

- Object Definitions

- Key frame specifications

- Generation of in-between frames

5

STORYBOARD LAYOUT

➢ It is the outline of a action. It defines the motion sequences as a set of basic that are to take place.

➢ Depending on the type of animation to be produced, the storyboard could be consist of a set of rough sketches or it could be a list of basis ideas for motion.

6

Storyboard Layout
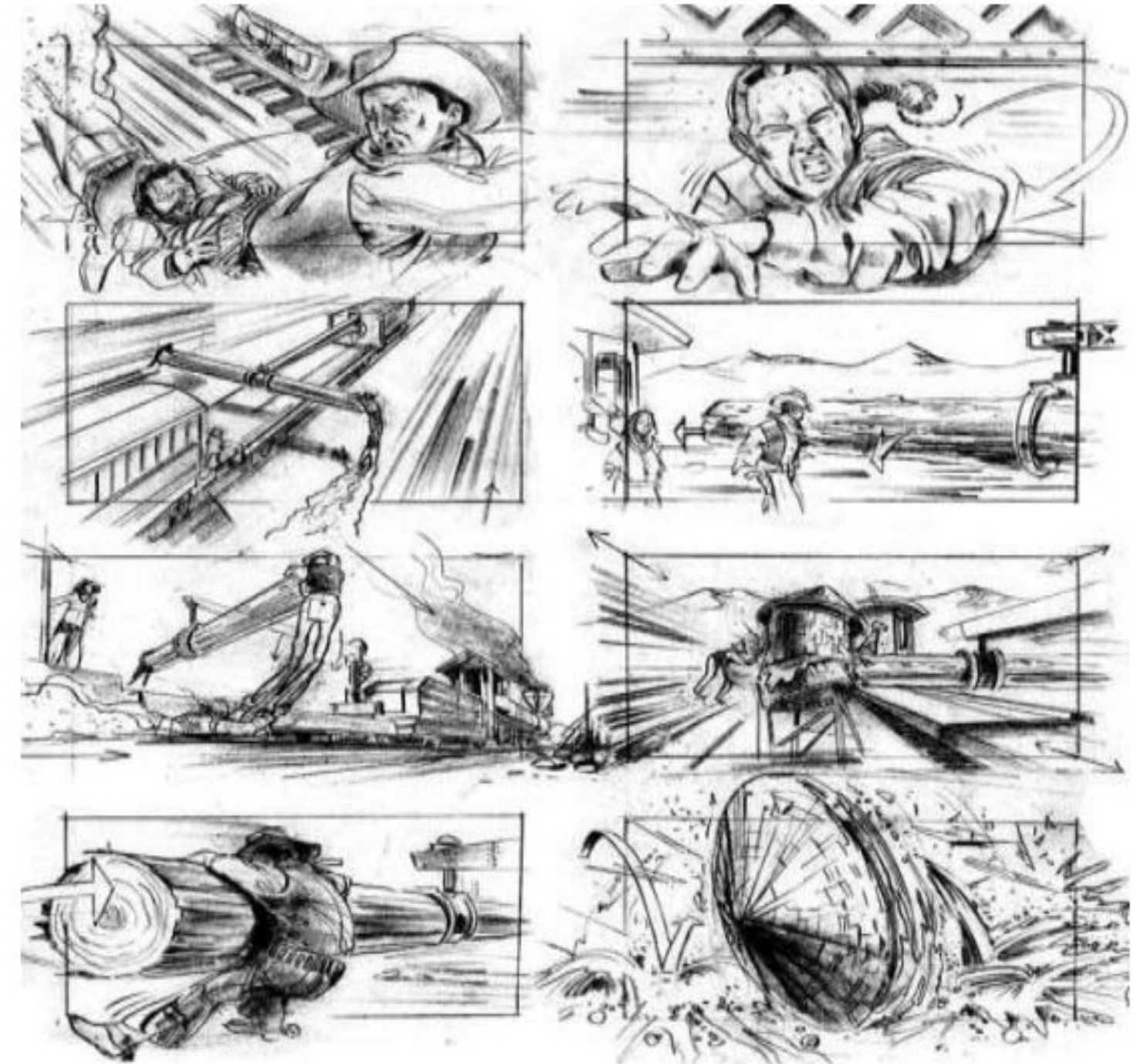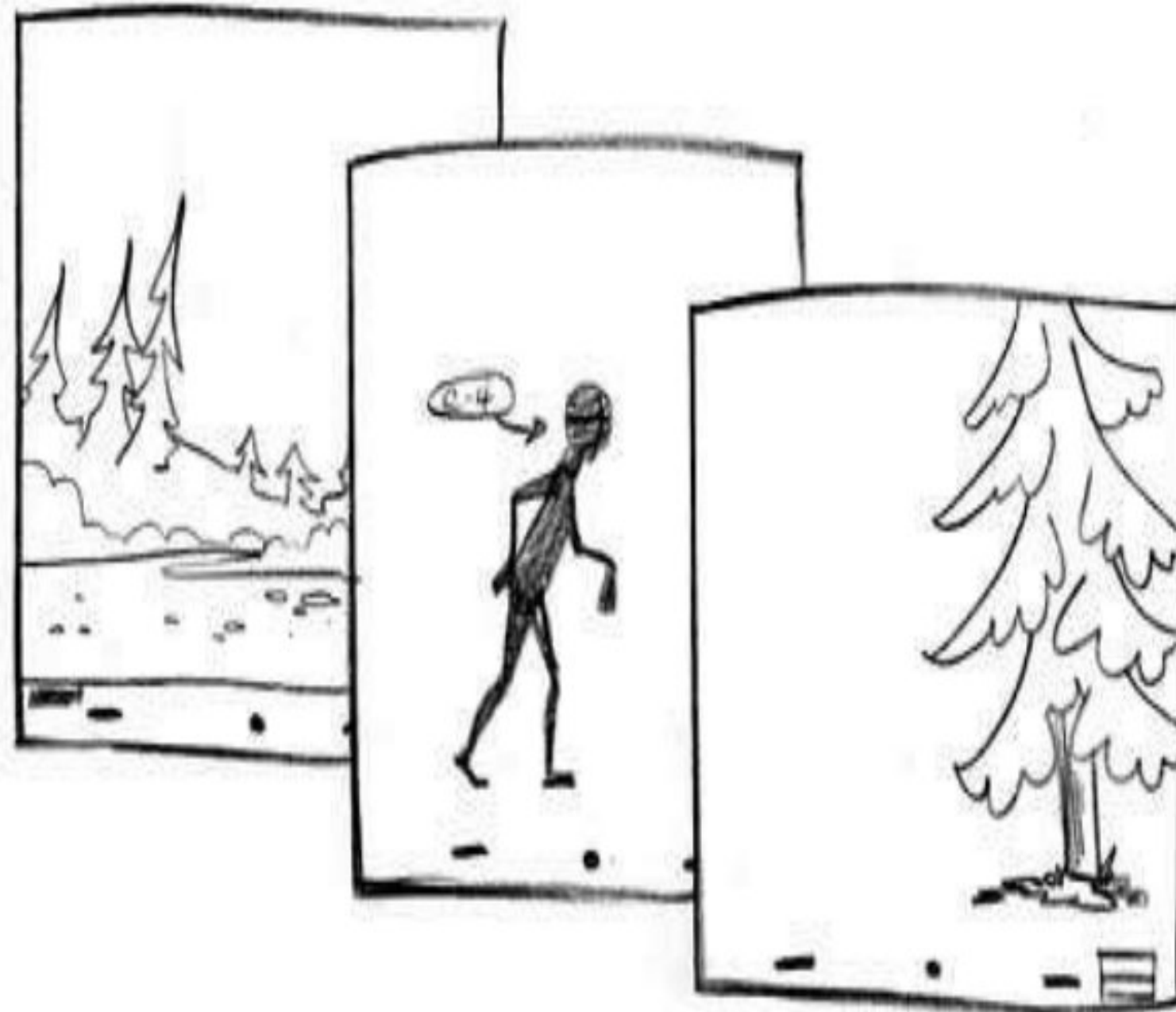
OBJECT DEFINITIONS

➤ Each object participating in the action is given object definition, such as terms of basic shapes, such as polygons or splines.
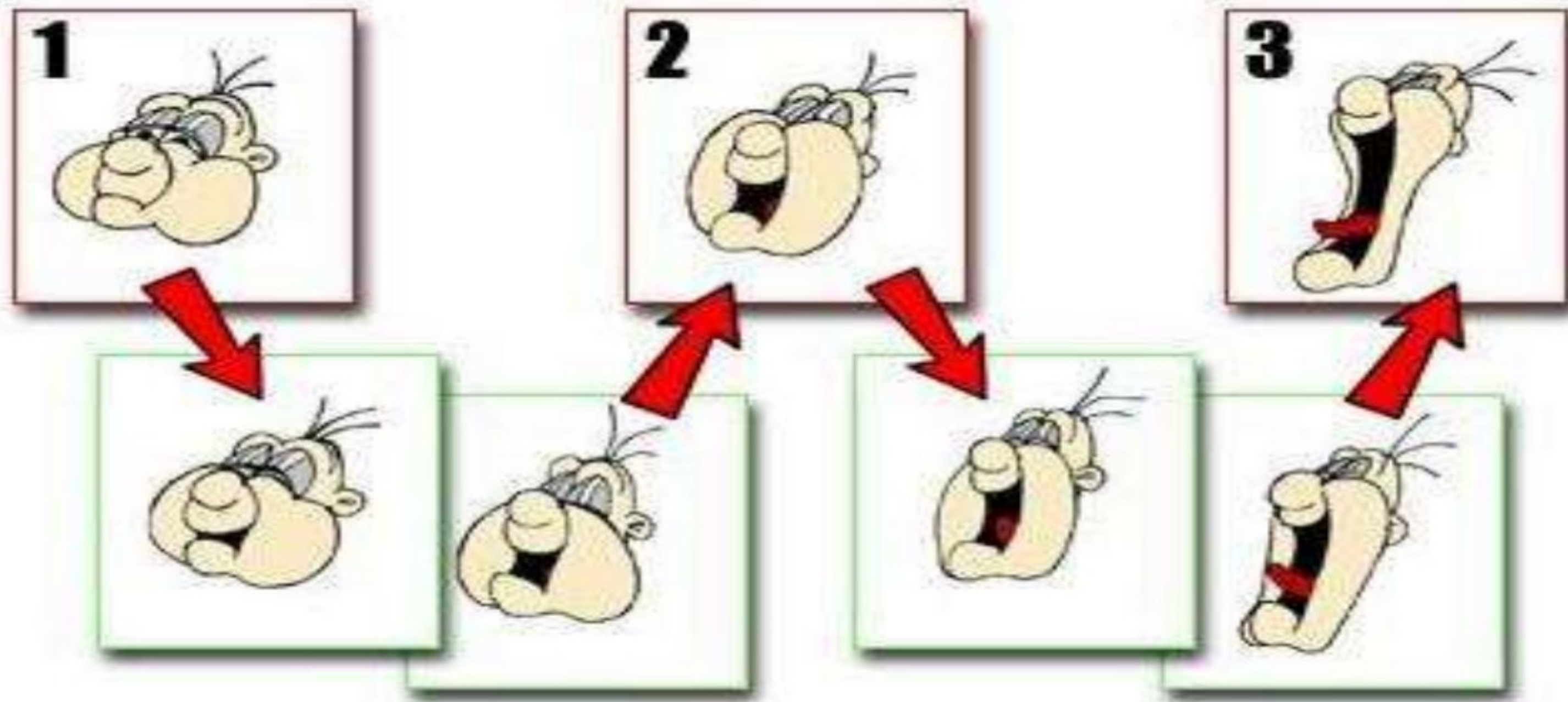
8

Object Definitions

FRAMES

➢ It is one of the many single photographic images in a motion picture. The individual frames are separated by frame lines. Normally, are needed for one second of flim.
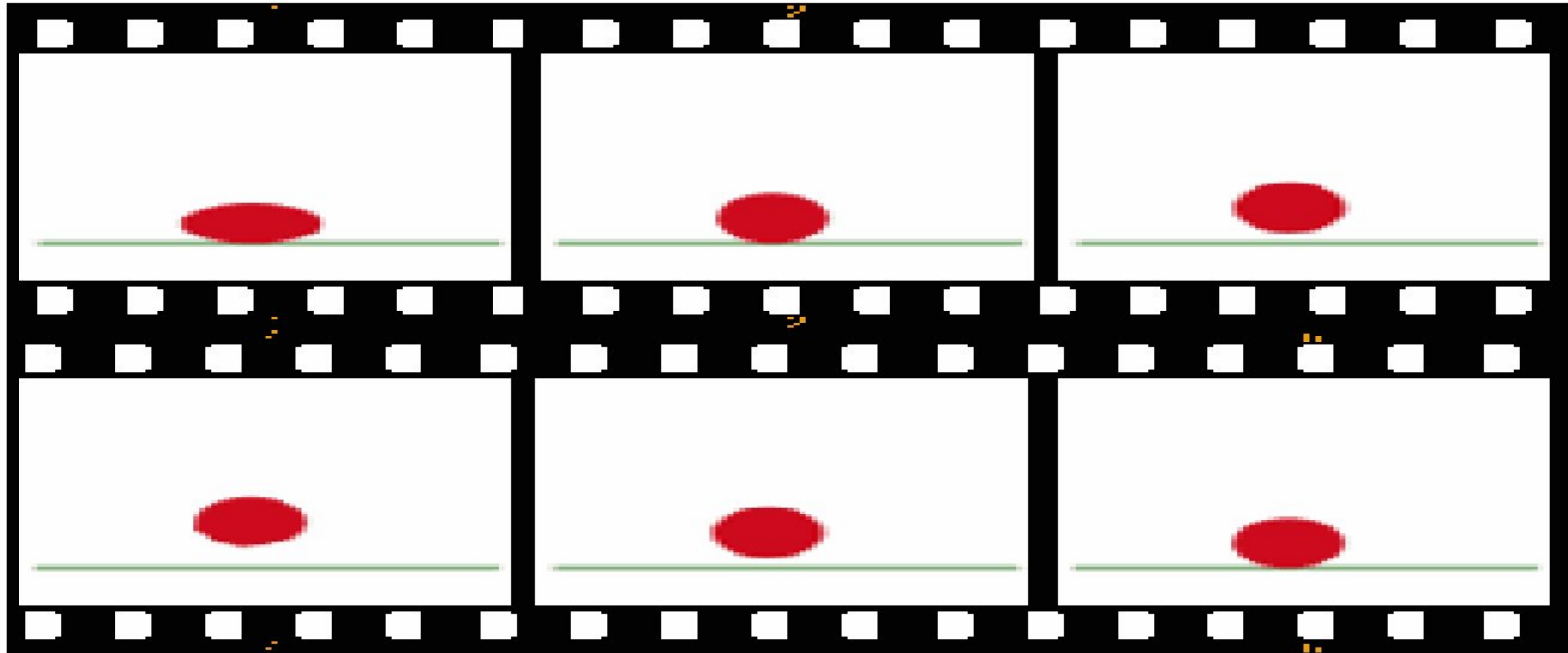
Frames

KEY FRAME

➢ A key frame in animation and filmmaking is a drawing that defines the starting and ending points of any smooth transition.

➢ A sequence of key frames which movement the spectator will see, but the position of the key frames on the film, defines the timing of the movement. 2 or 3 can be present for a span of a second.

Key Frame Specifications

IN BETWEEN

➢ It is a process of generating intermediate frames between 2 images to give appearance that the 1st image evolves smoothly into the second image. In-betweens are the drawing between the key frames which help to create the illusion of motion.

➢ Film requires 24 frames per second and graphics terminals are refreshed at a rate of 30 to 60 frames per second.
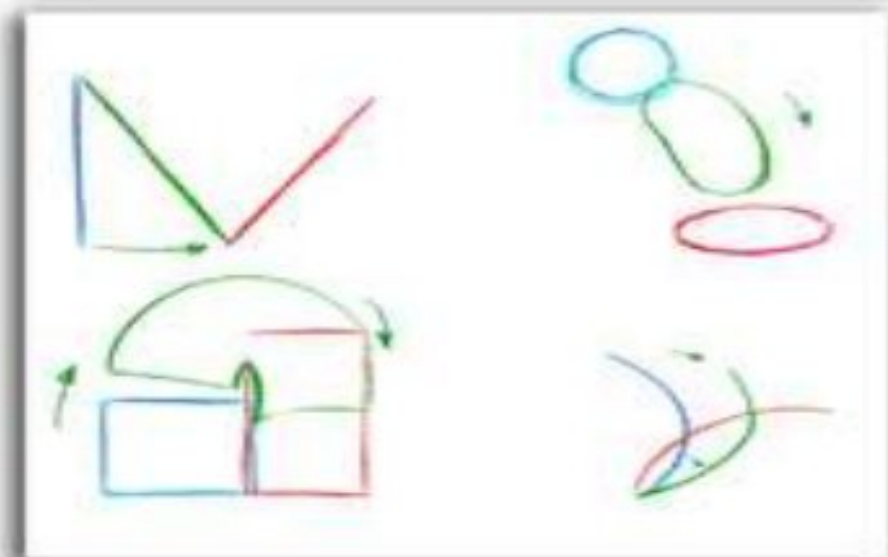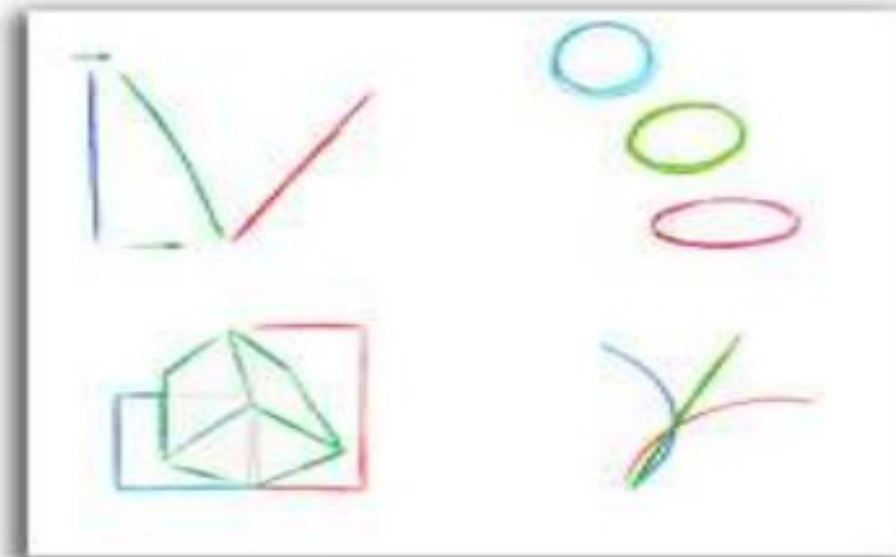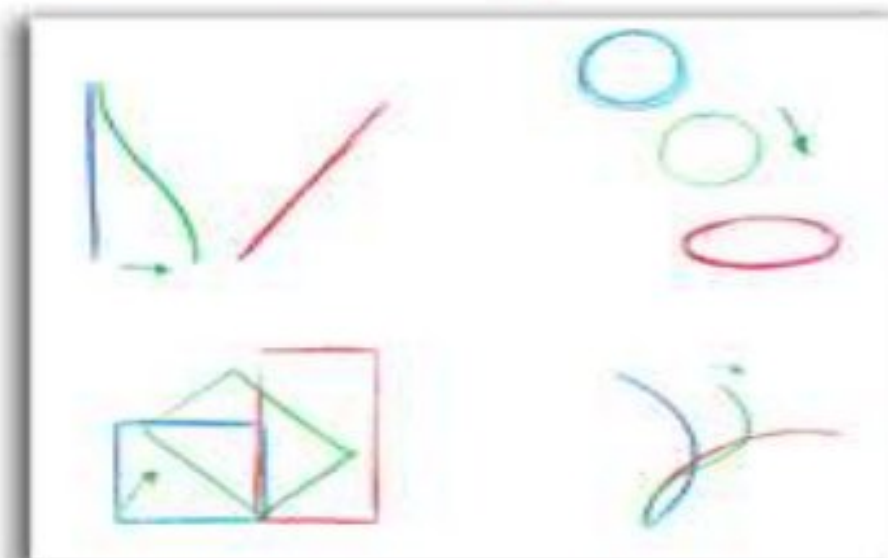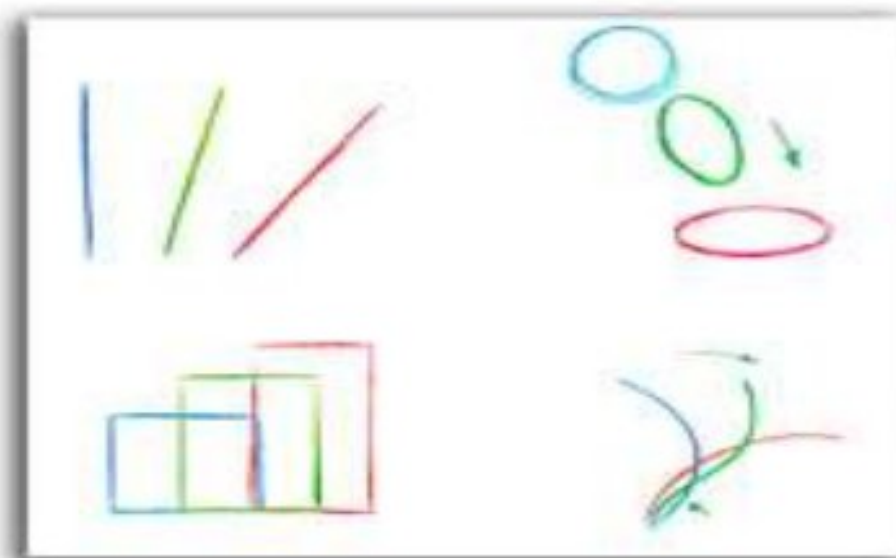
In-between Frames

RASTER ANIMATION

➢ On raster systems, we generate real-time animation in limited application using raster operation.

➢ Such as 2D or 3D transformations on objects.

➢ We can also animate objects along 2D motion paths using the color table transformation.

GENERAL COMPUTER ANIMATION FUNCTIONS

Animation Packages, such as wave font, provide special functions for designing the animation and processing individual objects.

➢ Object manipulation and rendering

➢ Camera motions

➢ Generation of in-betweens

17

Thank You

18