



SNS COLLEGE OF ENGINEERING



Kurumbapalayam(Po), Coimbatore – 641 107

Accredited by NAAC-UGC with 'A' Grade

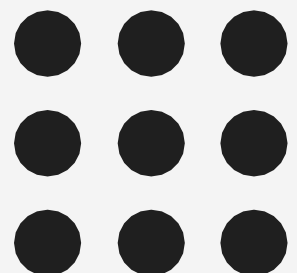
Approved by AICTE, Recognized by UGC & Affiliated to Anna University, Chennai

Department of Information Technology & Artificial Intelligence & Data Science

Course Name – COMPUTER GRAPHICS

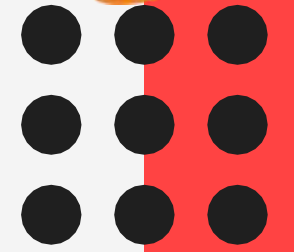
III Year / V Semester

Unit 5 – ANIMATIONS



DESIGN OF ANIMATION SEQUENCE





Computer Animation

What is Animation?

- Moving objects change over time according to scripted actions

Introduction

Computer animation is the process used for generating animated images (moving images) using computer graphics.

Animators are artists who specialize in the creation of animation.



APPLICATIONS



Video Games



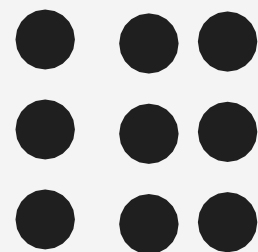
Cartoon

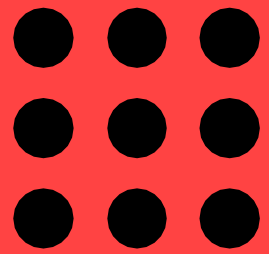


Mobile Phones

Design Of Animation Sequences

- Steps for designing animation sequences.
 1. Storyboard Layout
 2. Object definitions
 3. Key frame specifications
 4. Generation of in-between frames





STORYBOARD LAYOUT

- ❑ The storyboard is an outline of the action. It defines the motion sequence as a set of basic events that are to take place .
- ❑ Depending on the type of animation to be produced, the storyboard could consist of a set of rough sketches or it could be a list of the basic ideas for the motion.

Title: Placing Order



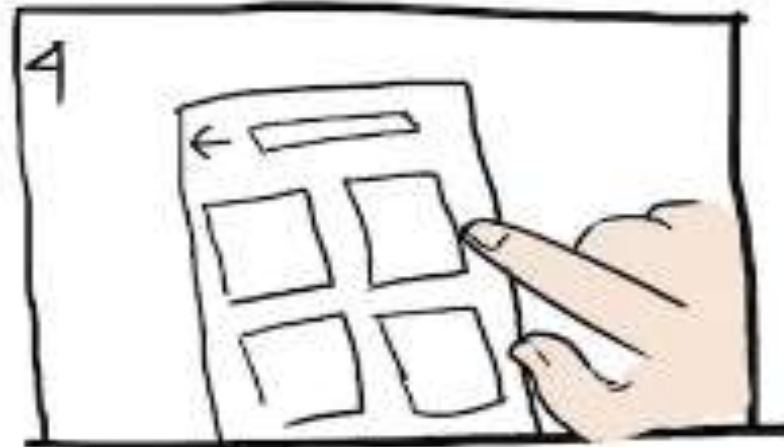
Tap the app icon



Open home app menu



Food section menu



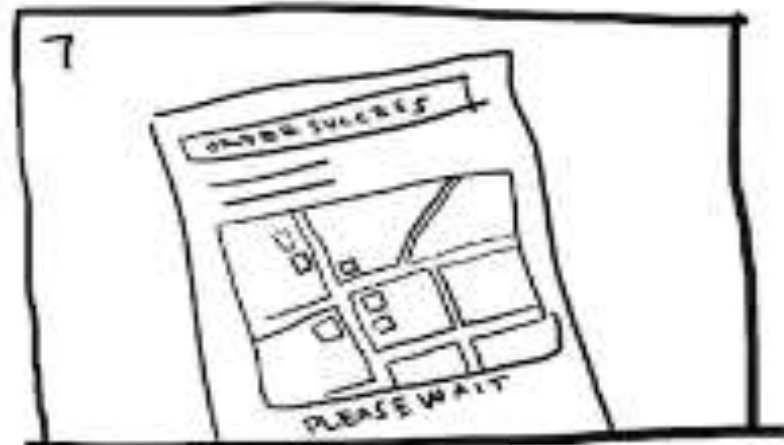
Restaurant menu page



Add the order



Confirm the order and pay the order



Showing the restaurant status and the driver where about



Notification when the order is arrived

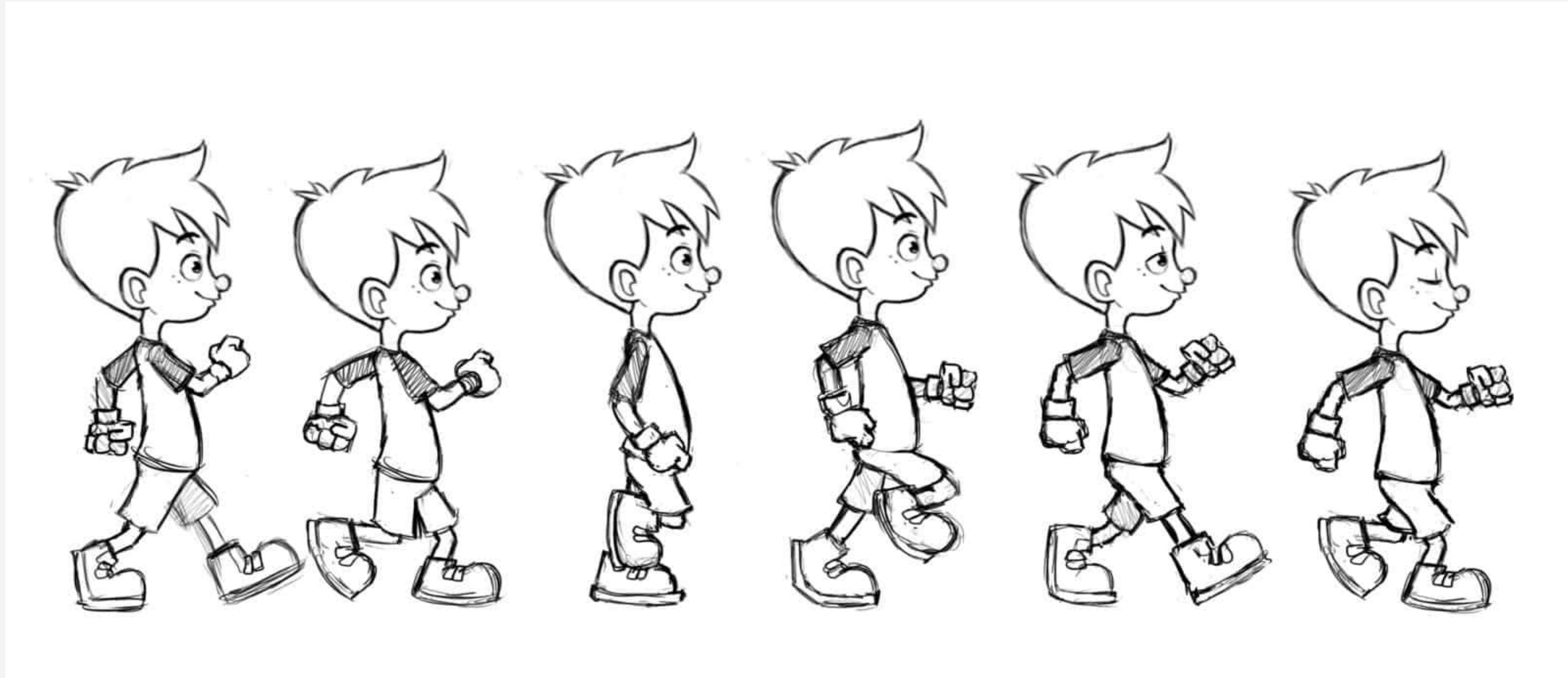
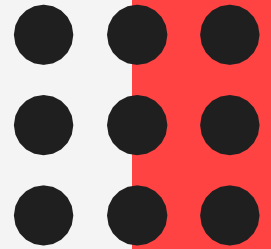


The driver arrived with the food



OBJECT DEFINITION

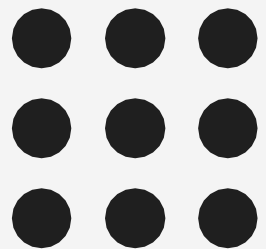
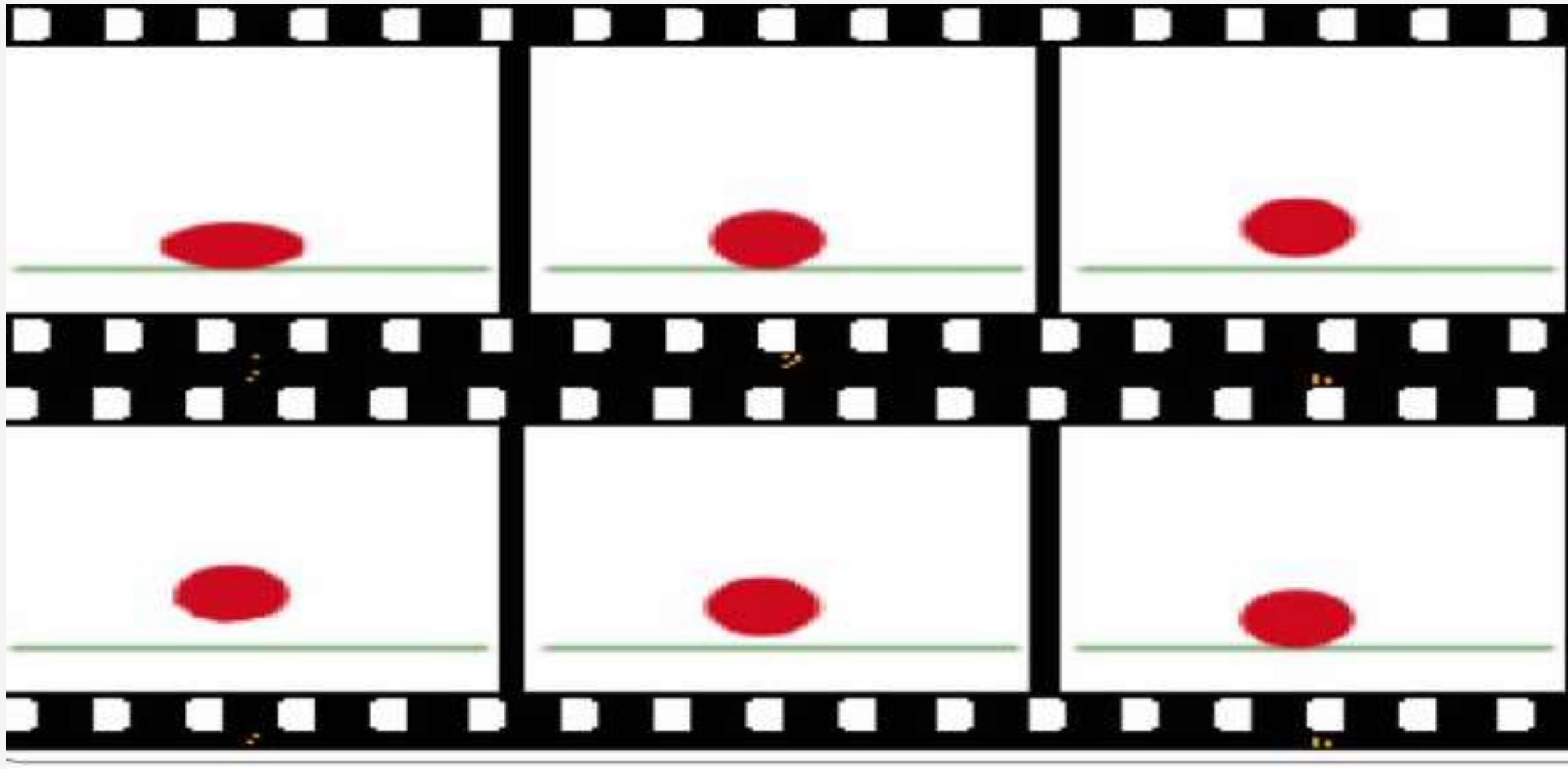
- An object definition is given for each participant in the action.
- Object can be defined in terms of basic shapes, such as polygons or splines In addition, the associated movements for each object are specified along with shape.





KEY FRAME SPECIFICATIONS

- A key frame is detailed drawing of the scene at a certain time in the animation sequence.
- Within each key frame, each object is positioned according to the time for that frame. Some key frames are chosen at extreme positions in the action; others are spaced so that the time interval between key frames is not too great.



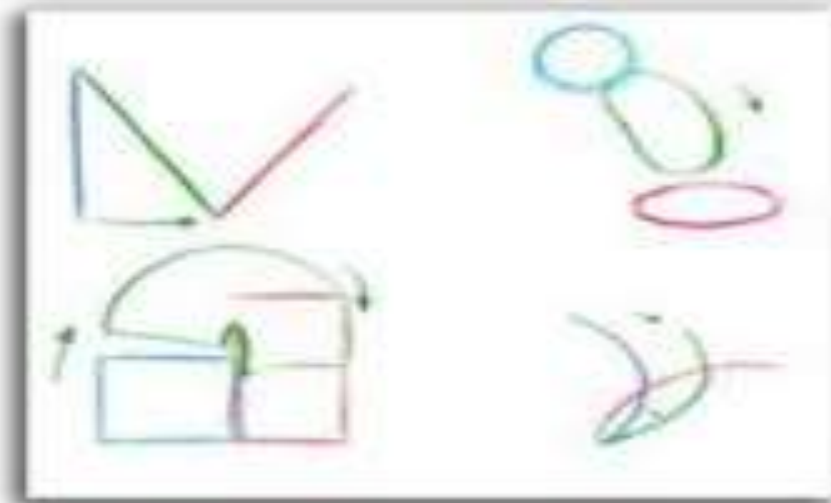
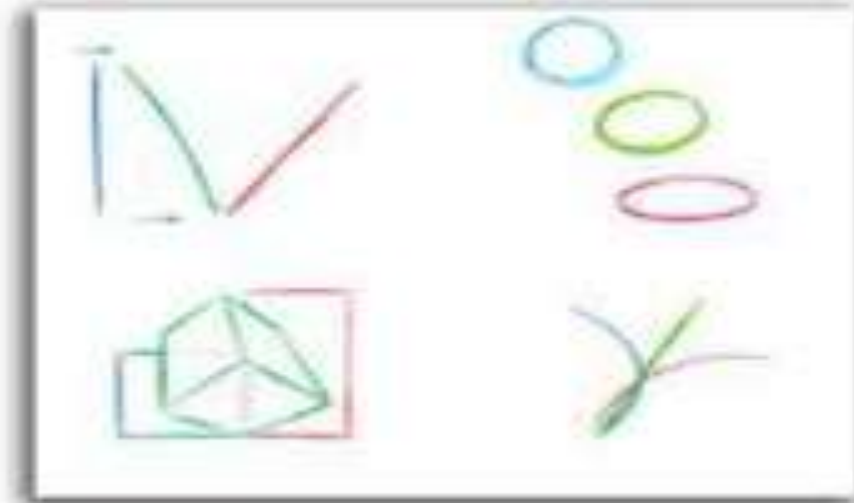
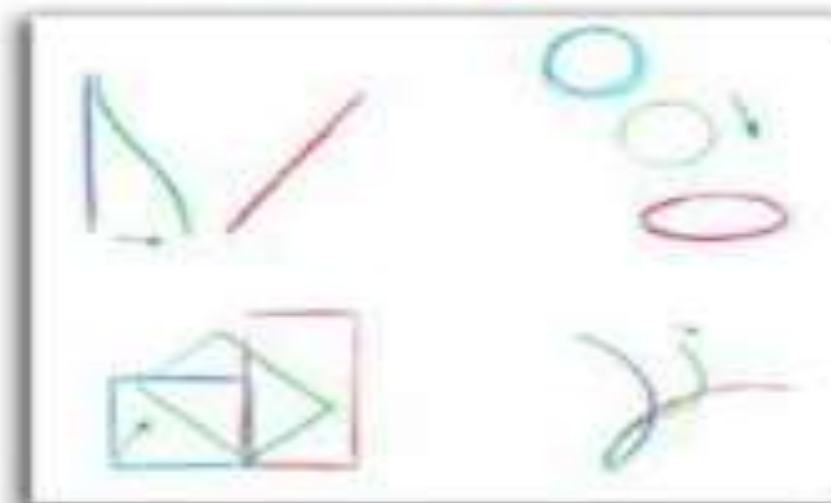


GENERATION OF IN-BETWEEN FRAMES

- 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.



Inbetweening



Do NOT bunch up your
MEETINGS ANYWHERE ALONG
THE PATH OF ACTION



Inbetweening is the fine art of knowing how and where to draw the line so that the action intended is clearly understood by the viewer. A good inbetween is not just half way between two lines.