

# Android 动画基础

# 动画的意义

- 视觉效果
- 引导用户

# 课程目标

- ✓ 了解定义**逐帧动画**的方法
- ✓ 掌握定义**视图动画**的方法
- ✓ 掌握定义**属性动画**的方法

# 学习内容

- 逐帧动画
- 视图动画系统
- 属性动画系统

# 逐帧动画

➤ **AnimationDrawable**

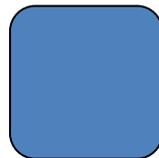
➤ **<animation-list>**

# 视图动画系统

## ➤ android.view.animation

### ➤ Animation

- AlphaAnimation
- ScaleAnimation
- TranslateAnimation
- RotateAnimation
- AnimationSet



# 透明度

<alpha>

AlphaAnimation



# 缩放

<scale>

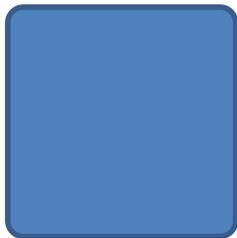
ScaleAnimation



# 位移

`<translate>`

**TranslateAnimation**



# 旋转

<rotate>

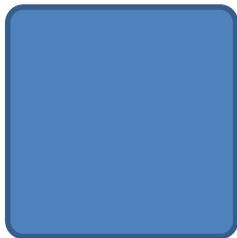
RotateAnimation



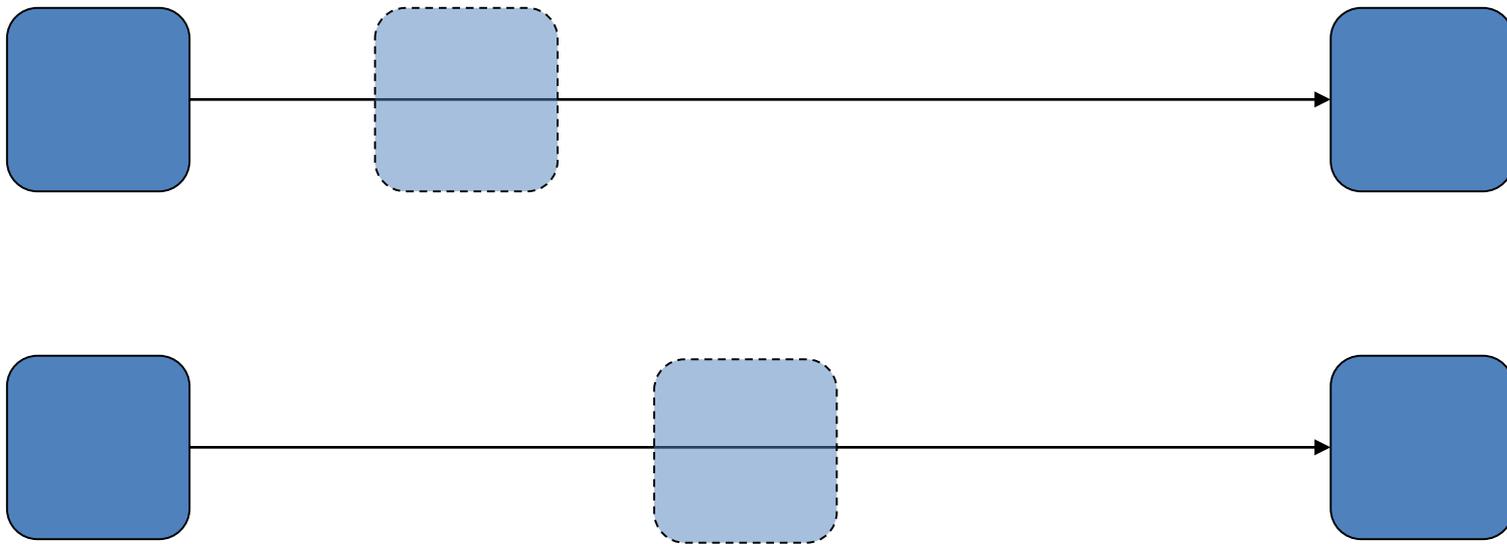
# 集合

`<set>`

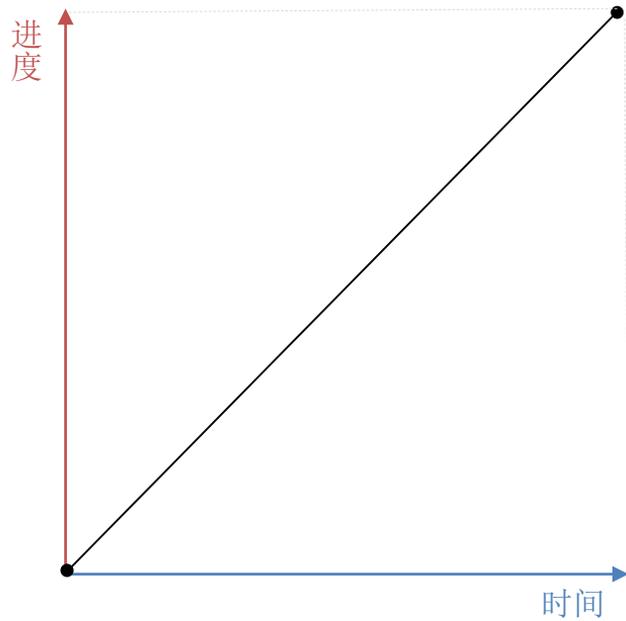
**AnimationSet**



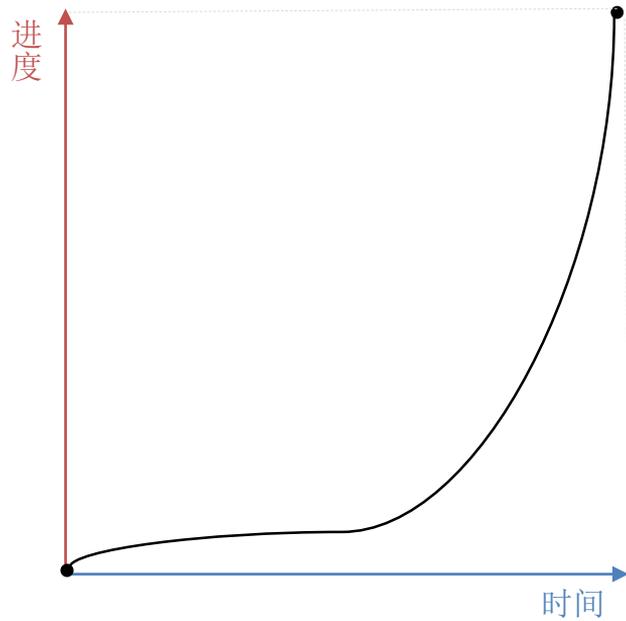
# Interpolator



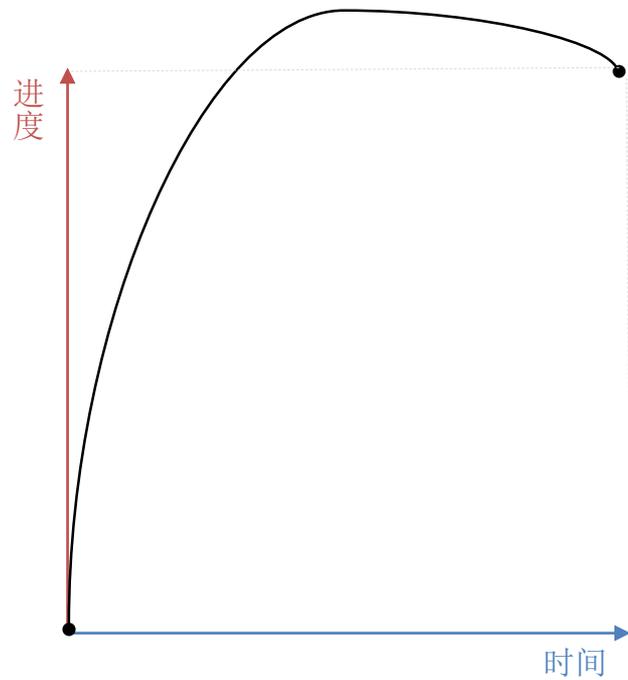
# Interpolator



# Interpolator



# Interpolator



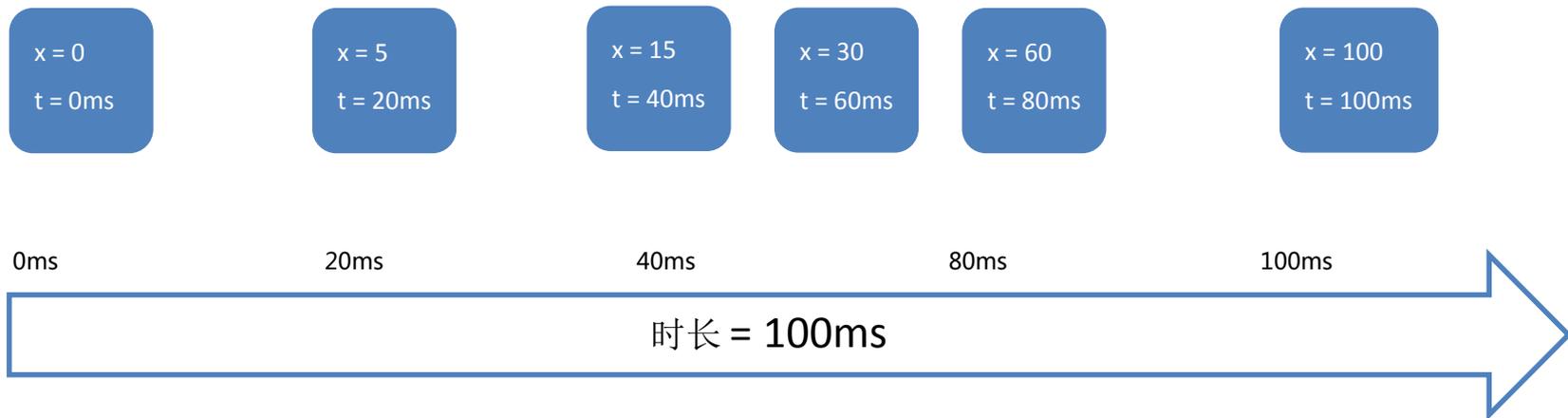
# 视图动画 vs. 属性动画

- 操作对象
- 属性

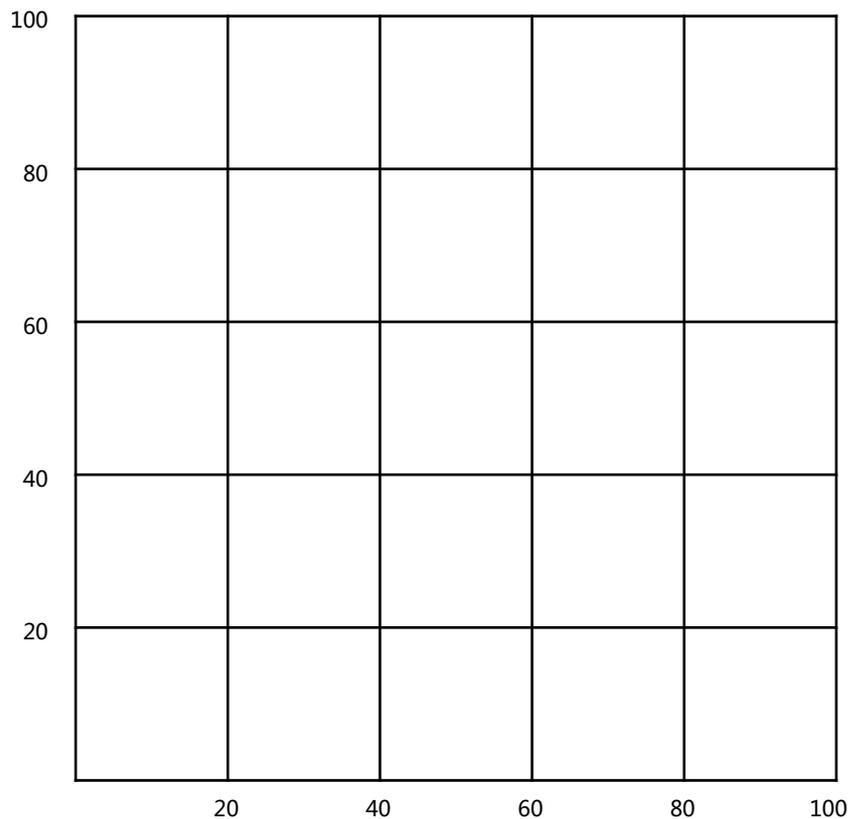
# 动画属性

- 时长
- 时间插值器
- 重复次数以及重复模式
- 动画集
- 延迟

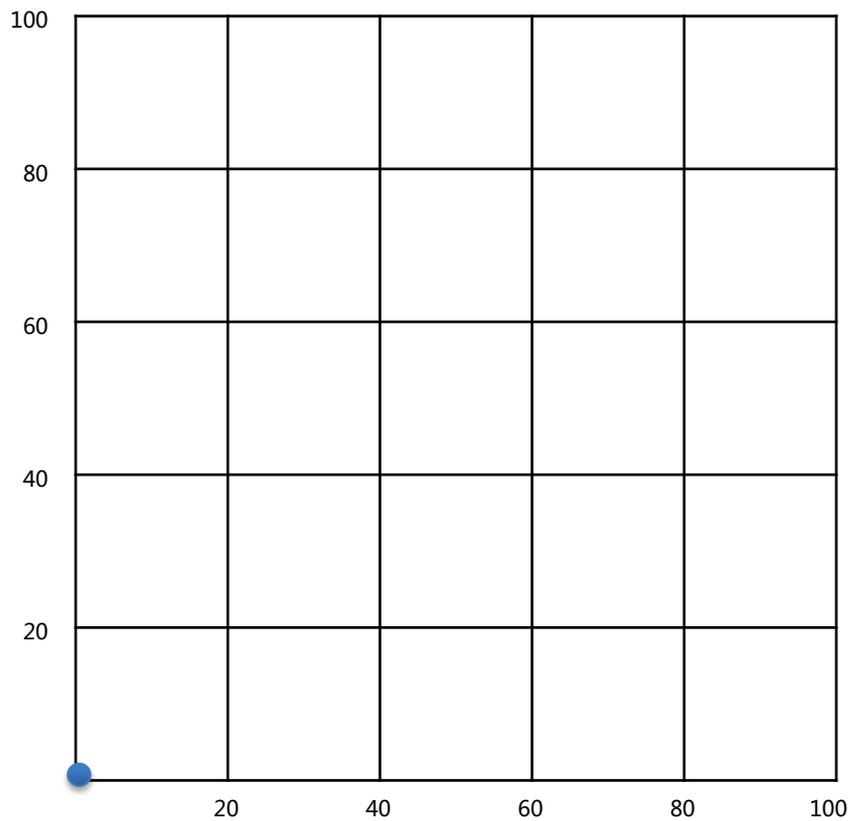
# 属性动画



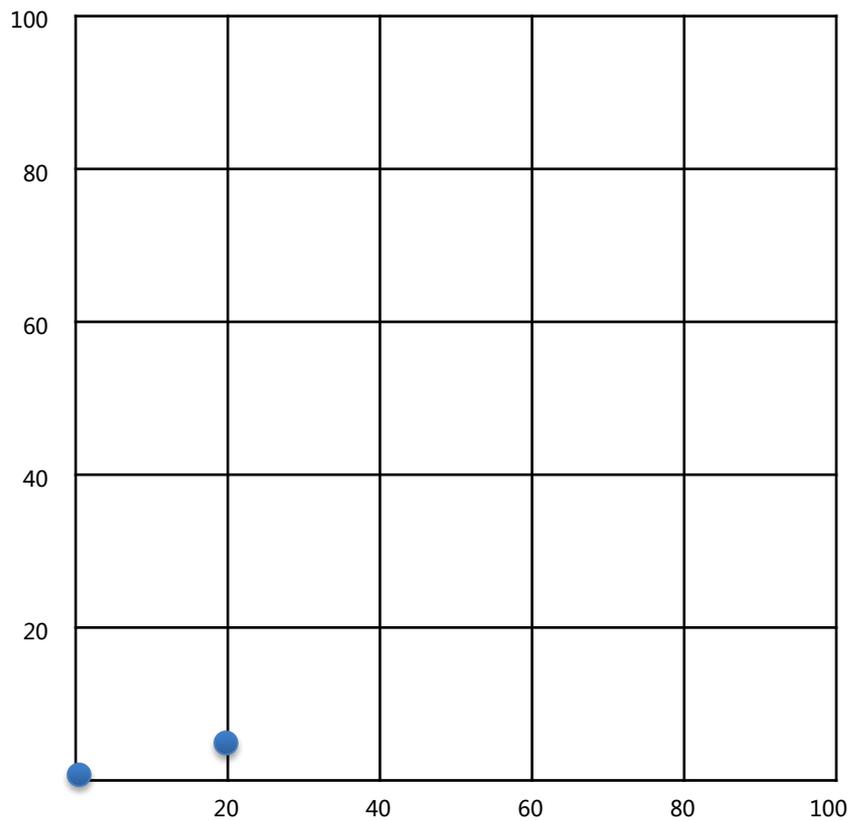
# 属性动画



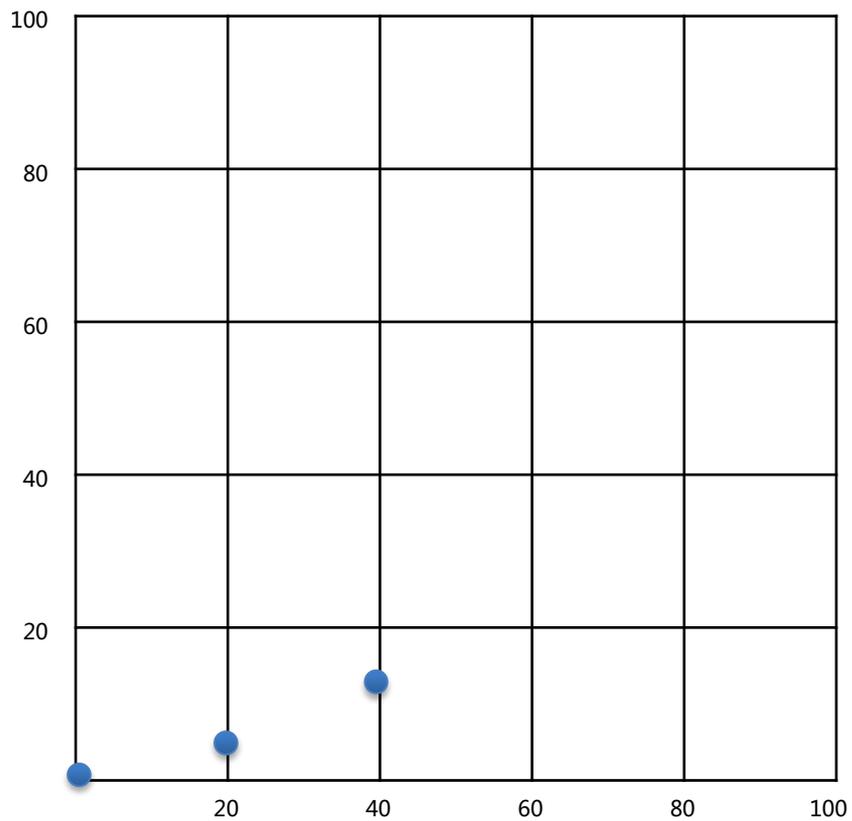
# 属性动画



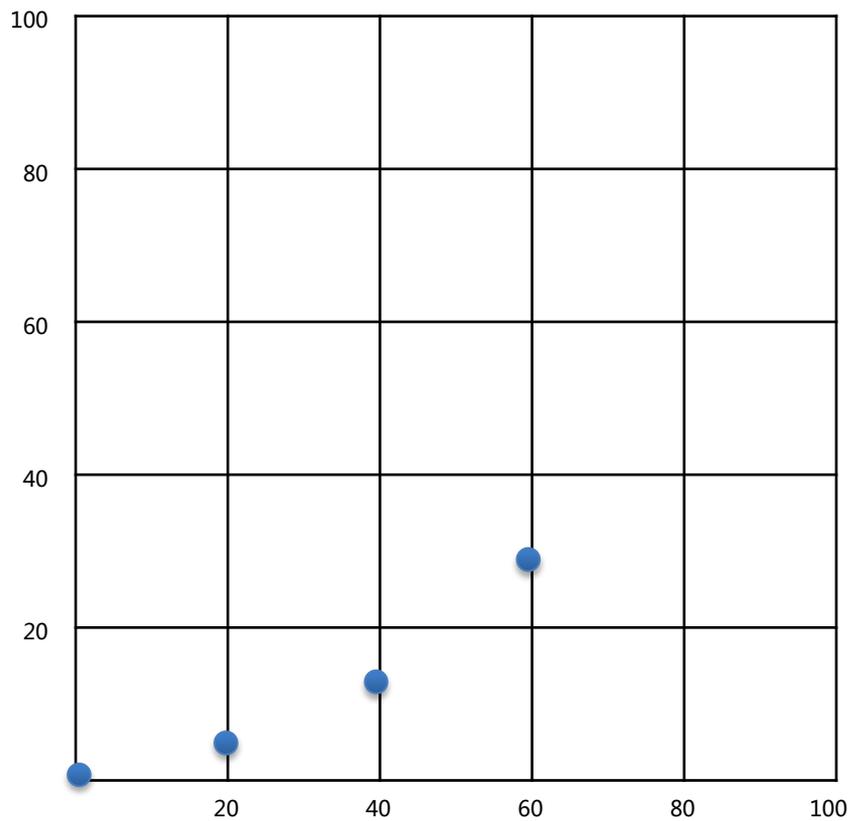
# 属性动画



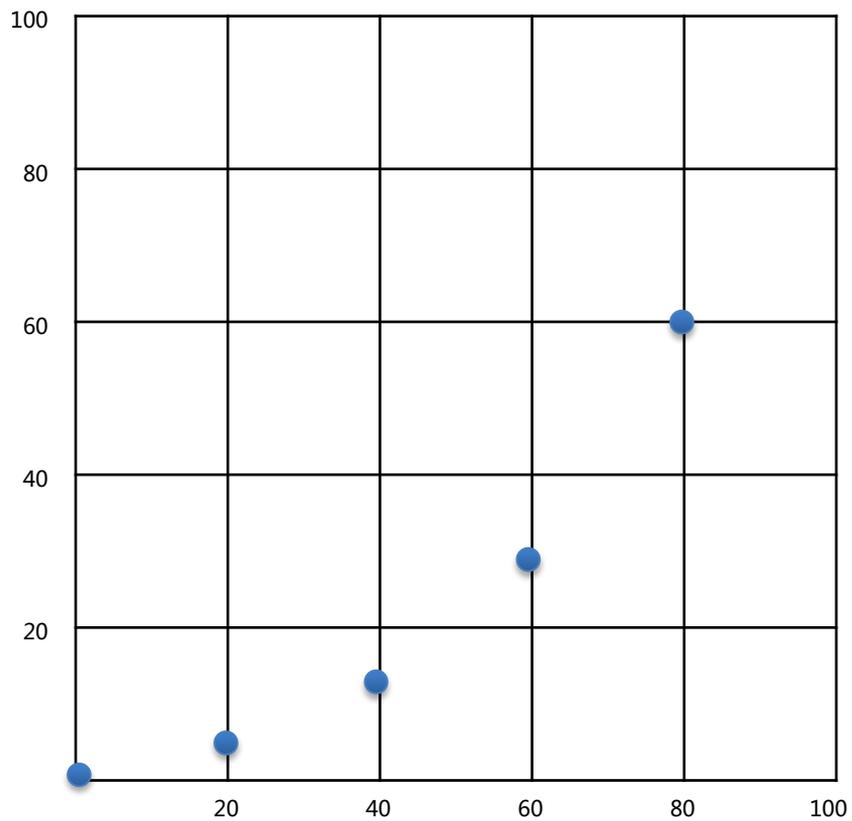
# 属性动画



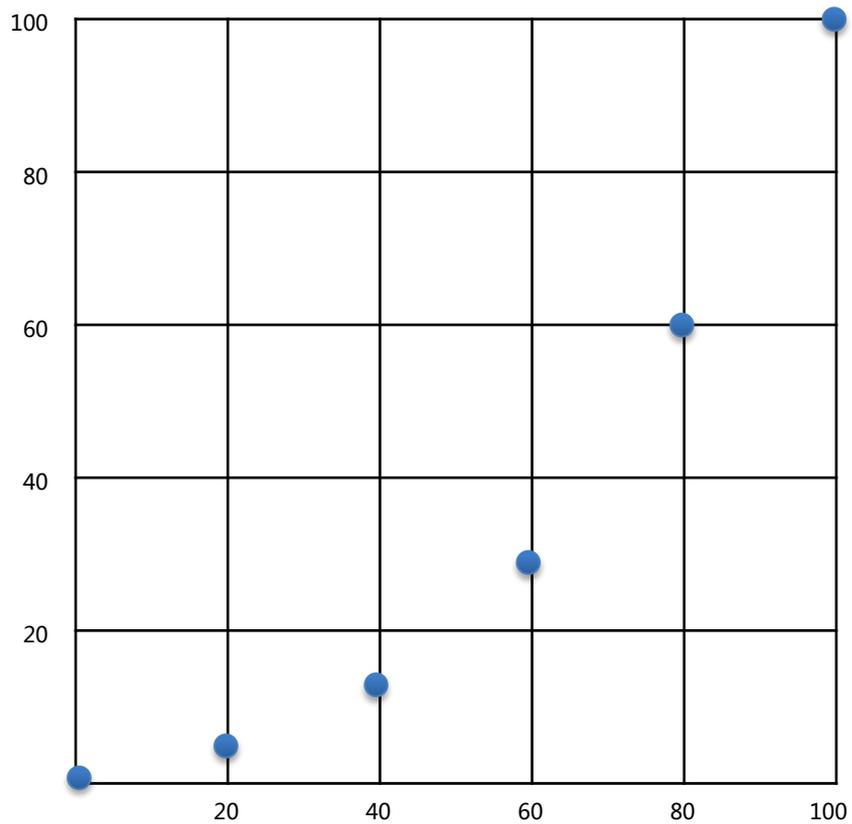
# 属性动画



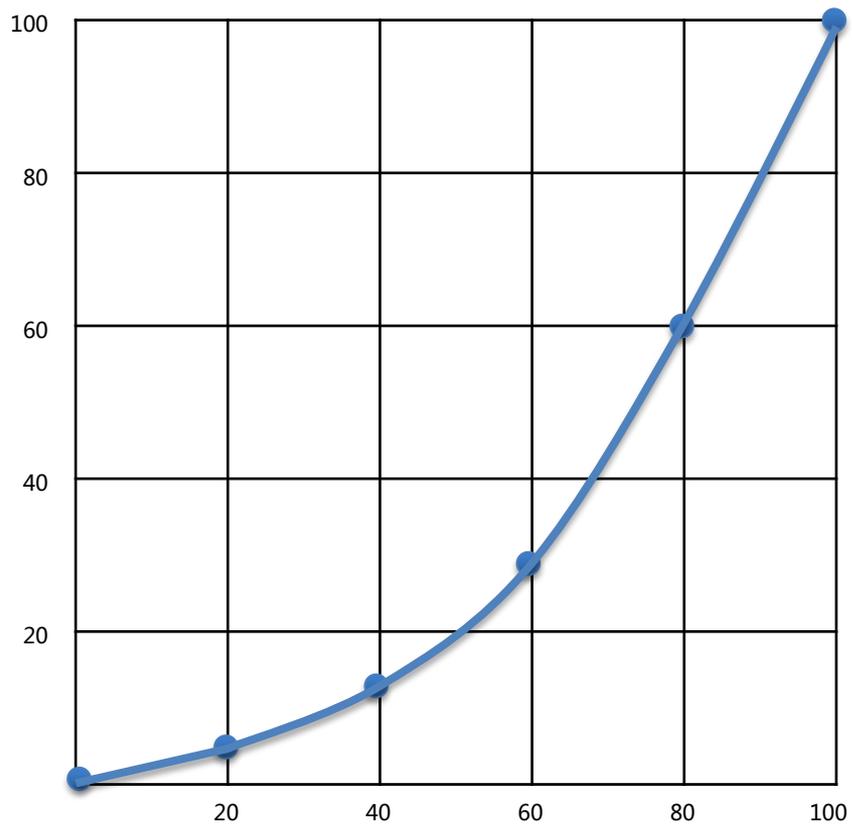
# 属性动画



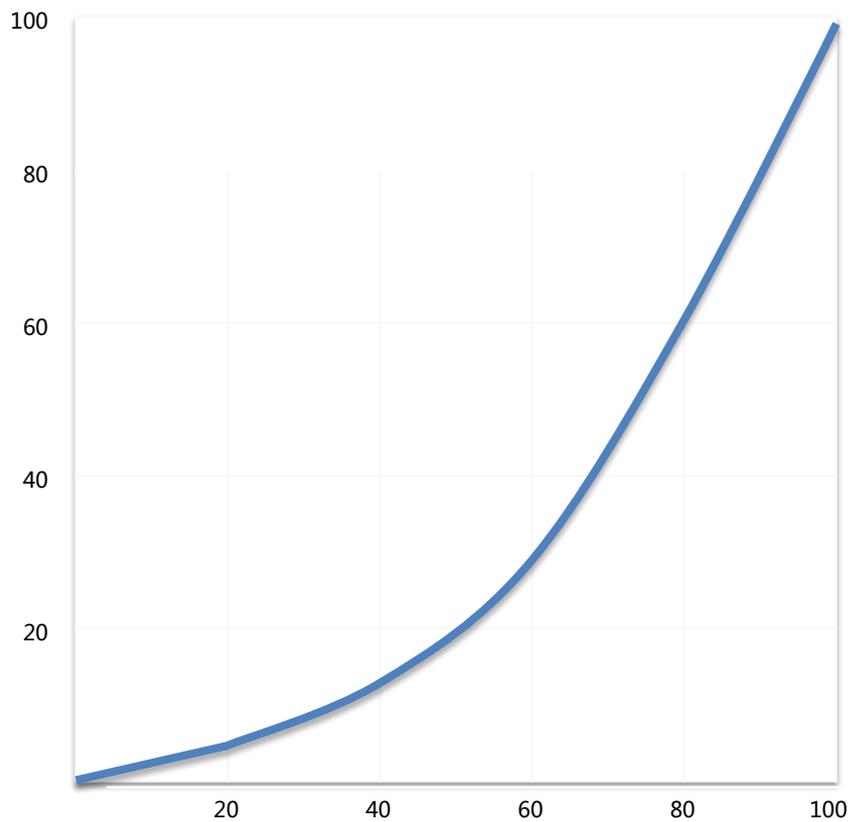
# 属性动画



# 属性动画



# 属性动画



# ValueAnimator

➤ **android.animation**

□ *Animator*

- **ValueAnimator**

# ObjectAnimator

➤ **<objectAnimator>**

➤ **AnimatorInflater**

# ViewPropertyAnimator

```
view.animate().translationX(100f).start();
```

# 总结

- 何时需要使用逐帧动画？
- 视图动画 vs. 属性动画