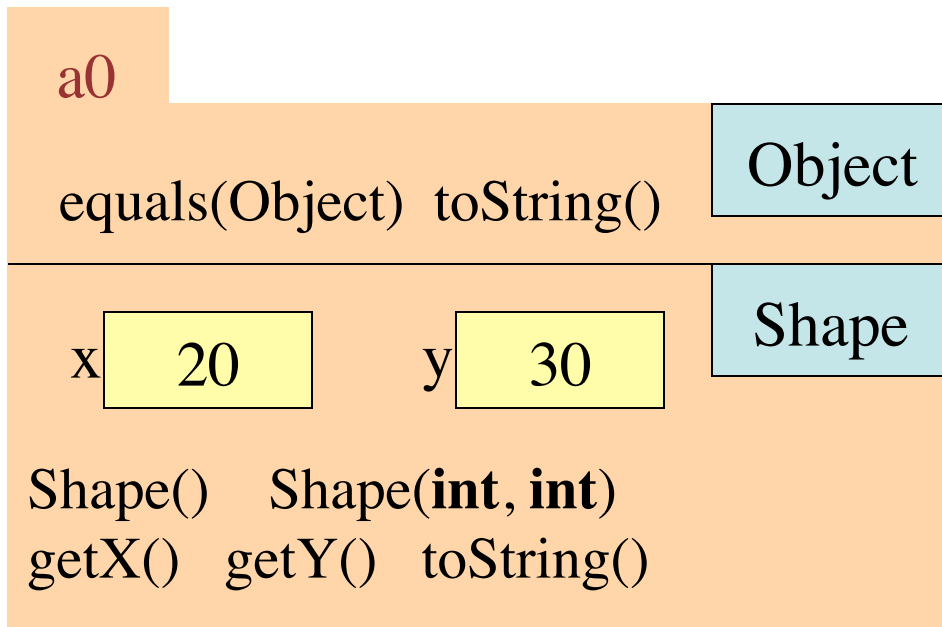


# Calling constructors from constructors



To call another constructor in the same class, use

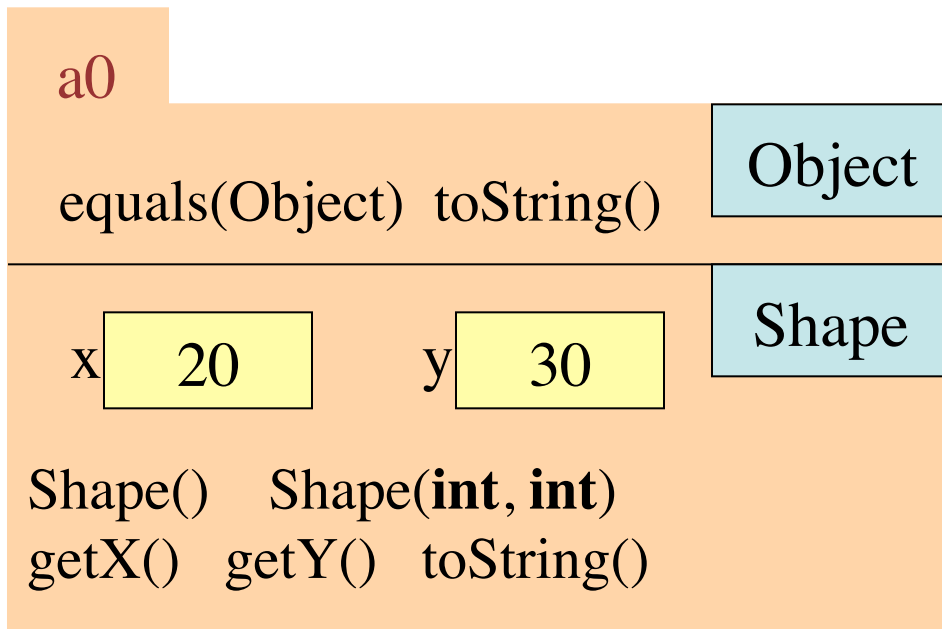
**this( ... )**

instead of

`Shape( ... )`

**Principle:** Use previously written methods as much as possible, in order to save time and effort in writing a program and also in testing and debugging it.

# The constructor call must be the first statement in the constructor



**Rule:** A constructor call

**this( ... );**

within a constructor must be the first statement in the constructor body.

```
public Shape() {  
    x= 20;  
    this(100, 100)  
}
```

**DOESN'T WORK!**

## Calling a superclass constructor

a0

equals(Object) toString()

Object

x

20

y

30

Shape

Shape() Shape(int, int)  
getX() getY() toString()

radius 10

Circle

Circle(int, int, int) area()  
getRadius() toString()

**Rule:** Make the first statement of the constructor a call

**super( ... )**

so that inherited fields are initialized first.

This superclass constructor call cannot be placed elsewhere.