

From JJ to Java

1. Declaration of Constants

Constant `name` = `expression`

public static final `type` `name` = `expr` ;

Constant declarations in Junior

```
Constant MAX_COUNT = 100
Constant PI = 3.14159
```

Constant Declarations in Java

```
public static final int MAX_COUNT = 100;
public static final double PI = 3.14159;
```

2. Declaration of Boxes (variables)

Box `name` **ofType** `type` **is** `access`

`access` `type` `name` ;

Declaration examples in Junior

```
Box count ofType int is public
Box cost ofType real is private
Box over21 ofType bool is private
```

Declarations in Java

```
public int count;
private double cost;
private boolean over21;
```

Similarly

```
Boxes i,j,k ofType int are public
Box name ofClass Str is private
```

Similarly

```
public int i,j,k ;
private String name;
```

3. Assignment of values

Set `name` = `expression`

`name` = `expression` ;

Assignment examples in Junior

```
Set count = 0
Set count = count + 1
Set area = PI * radius * radius
```

Assignment examples in Java

```
count = 0 ;
count = count + 1;
area = PI * radius * radius ;
```

4. Declaration and Assignment can be done together in Java

```
int count = 0;
double radius = 12.34;
double area = PI * radius * radius;
```