Figure 8.5 Comparing objects.

Recall you can compare the values of two primitive variables with the operators **==**, **!=**, **>**, and so on.

```
int i = 2;
int j = 2;
if (i == j)
    System.out.println("the same");
else
    System.out.println("not the same");
```

This works for objects too, but not in the way you might expect. For example, what does this print?

```
Ex e = new Ex();
e.field = 2;
Ex f = new Ex();
f.field = 2;
if (e == f)
    System.out.println("the same");
else
    System.out.println("not the same");
```

and this?

```
if (e.field == f.field)
    System.out.println("the same");
else
    System.out.println("not the same");
```

and, finally, this?

```
e = f;
if (e == f)
    System.out.println("the same");
else
    System.out.println("not the same");
```

> The **==** operator compares the *values* of two expressions.
> If the expressions are objects, those values are *references*.