

Announcements

- **Project due tomorrow night (Thursday)**
- **Exam #2 will be on Monday**

Return and go over Quiz...

Arithmetic Example

Example: [SimpleArithmetic.html](#)

Arithmetic Example

What went wrong?

How does a calculator handle this?

First Conclusion: We cannot rely on `==` to compare “floating point” values.

What can we do instead?

Example: [SimpleArithmetic2.html](#)

Representing Money

Second Conclusion: Never use floating point values to represent money!

Instead of using dollars:

```
var amount = 10.48; // $10.48
```

Use pennies:

```
var amount = 1048;
```

Increment Operators

Three ways to increment a variable:

```
x = x + 1;
```

```
x++;
```

```
++x;
```

How is **++x** different from **x++**?

They carry different values:

```
x++ → value matches x before increment
```

```
++x → value matches x after increment
```

Example: [Increment.html](#)

Decrement Operators

Three ways to decrement a variable:

```
x = x - 1;
```

```
x--;
```

```
--x;
```

Same semantics as “++”...

Other Shortcuts

`x = x + 7;`

`x += 7;`

`x = x - 7;`

`x -= 7;`

`x = x * 7;`

`x *= 7;`

`x = x / 7;`

`x /= 7;`