

# Type Casts

---

You can specify an **explicit conversion** by using a type cast, like this:

```
1 | int numerator = 5, denominator = 7;  
2 | double bad = numerator / denominator; // OOPS!!! now 0  
3 | double good = static_cast<double>(numerator) / denominator;
```

1. **numerator** and **denominator** are both integers
2. **bad** is a **double**, but the calculation uses **int**, so bad ends up with **0.0**.
3. **static\_cast** creates a temporary, anonymous **double** to "stand in" for **numerator** during the calculation, so floating-point (true) division is performed instead of integer division.

There are four **named casts**. We'll meet others later. Bjarne Stroustrup, (the inventor of C++) has listed several reasons why you should use these new-style casts on his [C++ FAQ](#).



This course content is offered under a [CC Attribution Non-Commercial](#) license. Content in this course can be considered under this license unless otherwise noted.