

Write the 3 lines of code asked for by the *Making Change* slide (Day 04, Slide 04).

Which statements require a cast to compile?

Which statements require a cast to produce the correct result?

Re-write each statement that requires a cast so that it has the correct cast.

```
1 int i = 5;
2 long g = 4;
3 double d = 12;
4 g = i + i;
5 d = i + g;
6 i = g + g;
7 g = d + d;
8 d = (i + g) / 2; // compute the average of i and g as a real number
9 d = (i + d) / 2; // compute the average of i and d as a real number
```

What are some advantages of delegating computation? (Day 05, Slide 02).

The API for `java.lang.Math` can be found at:

<http://download.oracle.com/javase/7/docs/api/java/lang/Math.html>

In the utility class `java.lang.Math`:

Are all of the fields `static`?

Are all of the methods `static`?

How many methods are named `abs`?

How many methods are named `min`?

How many methods are named `max`?

How many methods are named `round`?

What method would you use to compute e^x ?

What method would you use to compute x^y ?

What method would you use to compute \sqrt{x} ?

What method would you use to compute $\sqrt[3]{x}$?

Debate the accuracy of the statement: `Math.sqrt(x * x + y * y)` is equivalent to `Math.hypot(x, y)`.