Output

Section 3.7

Precision

```
const double PI = 3.141592653589793;
cout << PI << endl; // default output
```

- What does this output?

- Precision

```
cout << setprecision(2) << PI;
```

Output:

Precision

- Precision can also be used to set the number of digits after the decimal point

```
const double PI = 3.141592653589793;

cout << fixed << setprecision(2) << PI;
```

- Output:

Precision of numbers

```cpp
#include <iostream>
#include <iomanip> //New Library!

using namespace std;

int main()
{
  const double PI = 3.141592653589793;

  cout << PI << endl; // default output
  cout << fixed << setprecision(4) << PI << endl;
  cout << fixed << setprecision(3) << PI << endl;
  cout << fixed << setprecision(2) << PI << endl;
  cout << fixed << setprecision(1) << PI << endl;

  return 0;
}
```

Precision

- Precision and fixed are *sticky*
  - o remains in effect until changed

```cpp
const double PI = 3.141592653589793;
cout << fixed << setprecision(4) << PI << endl;
cout << setprecision(2) << PI << endl;
cout << PI << endl;

// Output?
```