Circle Facts

> This is a **warmup** exercise. It is **not compulsory**, and may be completed **individually or with your lab partner**.

You are given a `main` function and function prototypes to implement to calculate facts about a circle, given its radius. Copy the program `circleFacts.c` from the course account to your week 4 directory by typing **(make sure you type the dot at the end)**:

```
$ cp /web/cs1511/17s2/week04/files/circleFacts.c .
```

The three functions to implement are:

```
double area(double radius);
double circumference(double radius);
double diameter(double radius);
```

You must use the `#define` 'd value of pi.

Some Examples

```
Enter the radius: 1
Area          = 3.14
Circumference = 6.28
Diameter      = 2.00
```

```
Enter the radius: 17
Area          = 907.46
Circumference = 106.76
Diameter      = 34.00
```

```
Enter the radius: 7.2
Area          = 162.78
Circumference = 45.22
Diameter      = 14.40
```

To run some simple automated tests:

```
$ 1511 autotest circleFacts
```

To run Styl-o-matic:

```
$ 1511 stylomatic circleFacts.c
Looks good!
```

You'll get advice if you need to make changes to your code.

Submit your work with the *give* command, like so:

```
$ give cs1511 wk04_circleFacts
```

Or, if you are working from home, upload the relevant file(s) to the `wk04_circleFacts` activity on Give Online.