1. Write down all of the output generated by the following Python program, evaluating it by hand.

```
from __future__ import division
from pylab import *

def f(x):
    print x
    ans = x+x+6
    return ans

def g(x):
    ans = 7+x+6
    return ans

x = 6
f(g(x))
g(f(x))
x = g(x)
print x
```

2. Write down all of the output generated by the following Python program, evaluating it by hand.

```
from __future__ import division
from pylab import *

def f(x):
    ans = 9-x
    return ans

def g(x):
    ans = 4+x+x-9
    return ans

x = 8
f(g(x))
print g(f(x))
print x
```

3. Write down all of the output generated by the following Python program, evaluating it by hand.

```
from __future__ import division
from pylab import *

def f(x):
    ans = 6*x
    return ans

def g(x):
    ans = 4*3*x
    return ans

x = 3
print f(g(x))
x = g(x)
```

```
print g(f(x))
print x
```