

## Part 1 Solutions

1.

```
print "Your Name"
```

2.

```
m = 5
v = 10
print 0.5*m*v**2
```

3.

The expression evaluates to ~0.4 in the Python shell and 0.7 on a calculator; the cause is the integer division  $1/2$  which gives 0 in Python and 0.5 on the calculator.

4.

```
5
5
-5 10
```

5.

```
print "x\tx\tx\tx"
print "x\tx\tx\tx"
print "x\tx\tx\tx"
print "x\tx\tx\tx"
#The '\t' character prints a blank tab.
```

6.

```
temp = x
x = y
y = temp
#The code given in the question will set the values of both x and
y equal to y.
```

7.

- |                 |   |
|-----------------|---|
| a. 8, int       | i. error, cannot concatenate strings and integers |
| b. 3.0, float   | j. 1, int   |
| c. 20, int      | k. 4, int   |
| d. 20.0, float  | l. 3, int   |
| e. 4, int       | m. 'abababa', str                                 |
| f. 4.0, float   | n. error, cannot subtract strings                 |
| g. 'aaaaa', str | o. error, cannot divide by 0                      |
| h. 'ab', str    |   |