

## Reading Python Functions

Name \_\_\_\_\_

Write your answers to the questions here.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

For the following questions, circle the letter of the MOST correct answer.

1. The box below shows the output after a certain program has run. Select the program below that was executed to produce this result.

15

<p>(a)</p> <pre>def compare(a,b):     if a&gt;=b:         return a     else:         return b def main1():     x = compare(3,5)     y = compare(7,5)     print x + y main1()</pre>	<p>(b)</p> <pre>def compare(a,b):     if a&lt;=b:         return a     else:         return b def main1():     x = compare(3,5)     y = compare(7,5)     print x + y main1()</pre>	<p>(c)</p> <pre>def compare(a,b):     if a&gt;=b:         return a     else:         return b def main1():     x = compare(3,5)     y = compare(7,5)     print x * y main1()</pre>	<p>(d)</p> <pre>def compare(a,b):     if a&lt;=b:         return a     else:         return b def main1():     x = compare(3,5)     y = compare(7,5)     print x * y main1()</pre>
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2. Select the box that shows the output after the program is executed.

```
def main2():
    a = 0
    b = 0
    while a < 5:
        a = a + 1
        b = b + a
    print a, b
main2()
```

<p>(a)</p> 5 5	<p>(b)</p> 5 15	<p>(c)</p> 6 120	<p>(d)</p> 4 10
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3. Select the box that shows the output after the program is executed.

```
def func3(x, y):
    z = x + y
    return z
def main3():
    s = 1
    for i in range(3):
        s = func3(s, s)
    print s
main3()
```

<p>(a)</p> 2	<p>(b)</p> 4	<p>(c)</p> 8	<p>(d)</p> 16
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4. The box below shows the output after a certain program has run. Select the program below that was executed to produce this result.

-2

(a) def subtract(a, b): c = a - b return c def main4(): d = subtract(4, 5) print d main4()	(b) def subtract(a, b): c = a - b return c def main4(): d = subtract(5, 4) print d main4()	(c) def subtract(a, b): c = a - b return c def main4(): d = subtract(4, 6) print d main4()	(d) def subtract(a, b): c = a - b return c def main4(): d = subtract(6, 2) print d main4()
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5. Select the box that shows the output after the program is executed.

```
def func5(a, b):
    c = a * b
    d = a + b
    if c > d:
        return True
    else:
        return False
def main5():
    if func5(-4,4):
        print "Yes"
    if func5(-2,3):
        print "Yes"
    if func5(1,2):
        print "Yes"
main5()
```

(a) <nothing>	(b) Yes	(c) Yes Yes	(d) Yes Yes Yes
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6. Select the box that shows the output after the program is executed.

```
def main6():
    x = 0
    s = 0
    while x != 5:
        s = s + x
        x = x + 1
    print s
main6()
```

(a) 1	(b) 3	(c) 6	(d) 10
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7. Select the box that shows the output after the program is executed.

```
def main7():  
    print 8*3 + 3-8  
main7()
```

(a) 29	(b) 19	(c) 3	(d) 0
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8. Select the box that shows the output after the program is executed.

```
def main8():  
    for i in range(3):  
        print "code"  
main8()
```

(a) <nothing>	(b) 1 code 2 code 3 code	(c) 1 code 2 code	(d) code code code
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9. Select the box that shows the output after the program is executed.

```
def main9():  
    x = 20  
    x = 40  
    if x < 30:  
        print "smaller"  
    else:  
        print "greater"  
main9()
```

(a) SMALLER	(b) smaller	(c) smaller greater	(d) greater
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10. Select the box that shows the output after the program is executed.

```
def main10():  
    x = 1  
    y = 2  
    print x + y * 3 - 4  
main10()
```

(a) -3	(b) -1	(c) 3	(d) 5
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