

Programming Language Design  
9.1, 9.3, 9.6, 9.7

1.

- (a) {5,2,4}
- (b) {5,4,2}
- (c) {5,4,2}

3.

- (a) 0
- (b) 749
- (c) You could define it iteratively  

```
int x = 0, y = 1;
for (int i = 1; i <= n-2; i++)
    f = x + y;
    x = y;
    y = f;
```

6.

static pointer	dynamic pointer
parameters:	x = 24, y = 10
return value:	gcd(10, 4) = 2
static pointer	dynamic pointer
parameters	x = 10, y = 4
return value:	gcd(4,2) = 2
static pointer	dynamic pointer
parameters	x = 4, y = 2
return value:	gcd(2,0) = 2
static pointer	dynamic pointer
parameters:	x = 2, y = 0
return value	2

7.

<b>Quicksort</b> static pointer	dynamic pointer
parameters (pass by value-reference)	List := {4,2,5,1} Length := 4
<b>Sort</b> static pointer	dynamic pointer
parameters:	M := 1

	N := 4
Locals	I := undef J := undef Key := undef
<b>Swap</b>	
Parameters	etc, etc, etc