Name:			

1.124 Quiz 1

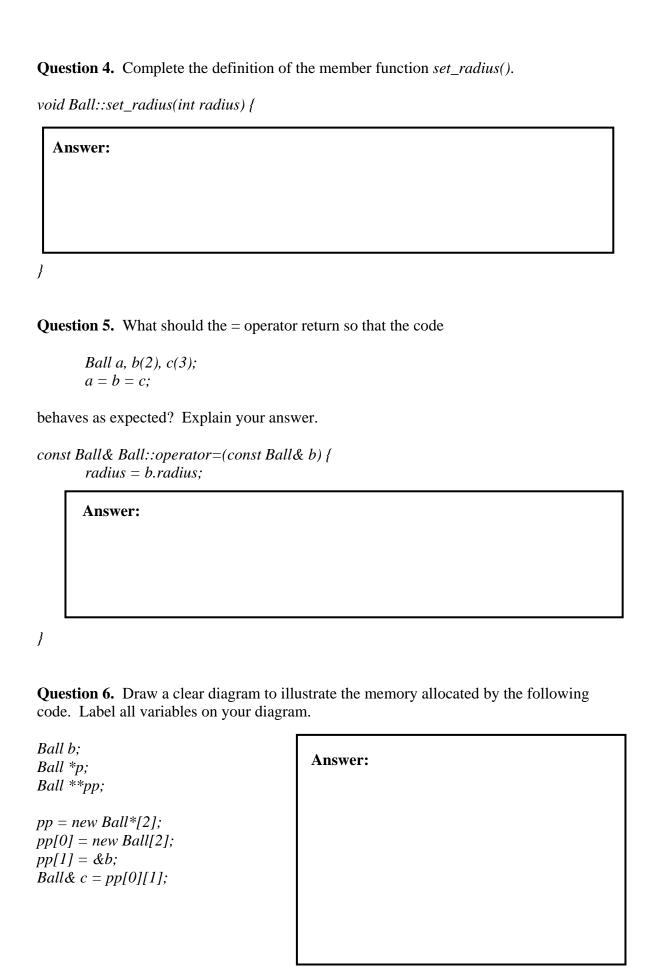
Thursday October 5, 2000

Time: 1 hour 15 minutes

Answer all questions. All questions carry equal marks.

```
#include <iostream.h>
class Ball {
private:
        const float pi;
        int radius;
public:
        Ball(int r=1) {
               radius = r;
        void set_radius(int radius);
       const Ball& operator=(const Ball& b);
        static int count;
       virtual void print() {
               cout << radius << endl;</pre>
};
int Ball::count = 0;
class BuckyBall: public Ball {
private:
        int color;
public:
       BuckyBall(int radius, int c) {
               color = c;
       void print() {
               cout << color << endl;</pre>
};
```

Question 1. S	how how you would initialize the member pi in class $Ball$.
Answer:	
Question 2. Wi	rite the copy constructor for class Ball.
Answer:	
	now how you would overload the $+=$ operator, so that the following code radius of b by 2.
Ball b; b += 2;	
Answer:	



Question 7.	How you would	release the memory	allocated in (Question 6?
-------------	---------------	--------------------	----------------	-------------

Answer:			

Question 8. What will be the output from the following program?

Answer:			

Question 9. Show how you would modify the <i>BuckyBall</i> constructor so that it correctly initializes the <i>Ball</i> part of a <i>BuckyBall</i> object.				
Ans	swer:			
Onog	tion 10. What atataments would you use to print out			
Ques	tion 10. What statements would you use to print out			
(i)	The color of object <i>a</i> ?			
(ii)	The color of object <i>b</i> ?			
(iii)	The radius of object <i>b</i> ?			
(iv)	The radius of object c ?			
Ruck	vBall a(1,2);			
	a(1,2), $a(2,2),$ $a(3,2),$ $a(3,$			
	vBall&c = a;			
Ang	wow.			
AllS	wer:			

nd cannot be use	;d.		
Answer:			
uestion 12. Gi	ve the definitions of the dest	tructors for the Bal	ll and BuckyBall classes.
Answer:			