

Section 3.1 Answers to Odd Numbered Questions

- 1)
- a) 4
 - b) 50
 - c) 55.1
 - d) 5
 - e) -5
- 3)
- a) $3.14159 * \text{pow}(r,2)$
 - b) $\text{sqrt}(\text{pow}(x1-x0,2) + \text{pow}(y1-y0,2))$
 - c) $.25 * \text{pow}(a,2) * \text{sqrt}(3.0)$
- 5) 543
- 7)
- ```
#include <iostream>
#include <cmath>
#include <iomanip>
using namespace std;

int main()
{
 cout.setf(ios::fixed, ios::floatfield);
 cout.setf(ios::showpoint);
 cout.precision(5);

 int n, m;

 cout << "Enter two integers: ";
 cin >> n >> m;

 for (int r=n; r<=m; r++)
 cout << "Area of a circle with radius " << n << " feet is "
 << setw(12) << 3.15149 * pow(r,2) << " feet" << endl;

 return 0;
}
```

**Section 3.2 Answers to Odd Numbered Questions**

- 1) 0  
1  
4  
9  
16

3) 5  
4  
6  
5  
7  
6  
8  
7

```
5) void Days(int years)
 {
 cout << years * 365 << " days old" << endl;
 }
```

7)

a) Days(40);

b) Days(27);

```
c) int age;
 cout << "Enter your age in years: ";
 cin >> age;
 Days(age);
```

```
9) double ASquare(double side)
 {
 return side * side;
 }
```

11)

```
a) double area;
 area = ASquare(5.3);
```

```
b) #include <iostream>
 using namespace std;
```

```
double ASquare(double);
```

```
int main()
```

```
{
 double oneSide;

 cout << "Enter the length of the side in feet: ";
 cin >> oneSide;
 cout << ASquare(oneSide) << " square feet" << endl;

 return 0;
}
```

```
double ASquare(double side)
{
 return side * side;
}
```

```
13) bool CanDrive(int years)
{
 if (years > 15)
 return true;
 return false;
}
```

```
15)
a) if (CanDrive(23))
 cout << "You can drive!" << endl;
else
 cout << "You cannot drive!" << endl;
```

```
b) #include <iostream>
using namespace std;
```

```
bool CanDrive(int years);
```

```
int main()
{
 int age;

 cout << "Enter age in years: ";
 cin >> age;
 if (CanDrive(age))
 cout << "You can drive!" << endl;
 else
 cout << "You cannot drive!" << endl;
```

```
 return 0;
}
```

```
bool CanDrive(int years)
{
 if (years > 15)
 return true;
 return false;
}
```

### Section 3.3 Answers to Odd Numbered Questions

```
1) main first: 1 2 3
 AllLocal only: 4 5 3
 main last: 1 2 3
```

```
3) main first: 9 2 3
 NotAllLocal first: 8 2 3
 NotAllLocal middle: 9 3 4
 NotAllLocal last: 4 5 6
 main last: 9 2 3
```

5) 4545