

1. Assume that the following variables are defined:

int age;

double pay;

char section;

Write a single cin statement that will read input into each of these variables.

cin >> age >> pay >> section;

5. Write C++ expressions for the following algebraic expressions:

$A = 12x$

$z = 5x + 14y + 6k$

$y = x^4$

$g = h + 12 / 4k$

$c = a^3 / b^2k^4$

12. Write a cout statement so the variable divSales is displayed in a field of 8 spaces, in fixed point notation, with a precision of 2 decimal places. The decimal point should always be displayed.

cout << fixed << showpoint << setprecision(2);

cout << setw(8) << divSales;

18. The \_\_\_\_\_ library function returns the exponential function of a number.

exp

$y = \exp(x)$

21. The \_\_\_\_\_ library function returns the base-10 logarithm of a number.

$\sim \log_{10}$

log10

$y = \log_{10}(x)$

27. Write a pseudocode algorithm for a program that asks the user to enter a golfer's score for three games of gold, and then display the average of the three scores. After convert it to a complete C++ program:

Main.cpp

```
#include <iostream>
```

```
#include "gold.h"
```

```
Int main()
```

```
{
```

```
    Golf g;
```

```
    g.getScores();
```

```
    Cout << "Average is: " << g.getAverage() << endl;
```

```
}
```

```

Golf.cpp
#include <iostream>
#include "golf.h"
Using namespace std;

Void Golf::getScores();
{
    Cout << "Enter Score 1: "
    Cin >> score1;
    while(score1 < 0)
    {
        cin.clear();
        cin.ignore();
        Cout << "Please enter a valid score: ";
        Cin >> score1;
    }
    Cout << endl;
    Cout << "Enter Score 2: "
    Cin >> score2;
    while(score2 < 0)
    {
        cin.clear();
        cin.ignore();
        Cout << "Please enter a valid score: ";
        Cin >> score2;
    }
    Cout << endl;
    Cout << "Enter Score 3: "
    Cin >> score3;
    while(score3 < 0)
    {
        cin.clear();
        cin.ignore();
        Cout << "Please enter a valid score: ";
        Cin >> score3;
    }
}

Int Golf::getAverage();
{
    Int total = score1 + score2 + score3;
    Return total/3;
}

```

Golf.h

Class Golf

```
{  
    Private:  
    Int score1, score2, score3;  
    Public:  
    Void getScores();  
    Int getAverage();  
}
```