**Tutorial 5**

1. What is a pointer? How do you declare a pointer variable?
2. What unfortunate misinterpretation can occur with the following declaration?

int\* int\_ptr1, int\_ptr2;

1. What is wrong in the following code?
2. int x = 30;

int \*pX = x;

cout << “x is ” << x << endl;

cout << “x is ” << px << endl;

1. double x = 3.0;

int \*pX = &x;

1. Give at least two uses of the \* operator. State what the \* is doing, and name the use of the \* that you present.
2. What is the output produced by the following code?

int \*p1, \*p2;

p1 = new int;

p2 = new int;

\*p1 = 10;

\*p2 = 20;

cout << \*p1 << " " << \*p2 << endl;

p1 = p2;

cout << \*p1 << " " << \*p2 << endl;

\*p1 = 30;

cout << \*p1 << " " << \*p2 << endl;

How would the output change if you were to replace

\*p1 = 30;

with the following?

\*p2 = 30;

1. What will be the output produced by the following code segment?

int a;

int\* p;

a = 2;

p = &a;

a = a + 1;

cout << \*p;

int a;

int\* p;

a = 2;

p = &a;

a = a + 2;

cout << \*p;

int a;

int b;

int\* p;

int\* q;

a = 3;

p = &a;

q = p;

\*q = \*q + 5;

cout << \*p;

int a;

int\* p;

a = 4;

p = &a;

cout << (\*p) / a;