

1. (18pts) What are the results of the following evaluations? Show the fully parenthesized form of the expression that Java uses for the evaluation, and show the value of the expression. Assume that

double x = 2.0, y = 3.0, z = 5.0;
int a = 2, b = 2, c = 5;

Expression	Fully Parenthesized Expression	Value
$x - y * y + z$		
$(x + y / 2) * c / a$		
$107 / 3 + c / b$		
$z + 107 \% 3$		
$(c == 5) \&\& (a > 2) \ \ (b + c != 3)$		
$!(c > 10) \&\& (a + b == 4)$		

2. (8 pts) Consider the following Java code fragment.

```
int x ;
String s = "pink";
x = input.nextInt();
if( x < 10 )
{
    if ( x > 5)
        s = "red";
    else
    {
        if ( x < 5)
            s = "blue";
        else
            s = "green";
    }
}
System.out.println( s);
```

Under what conditions will the fragment print

a) red

b) pink

c) blue

d) green