

QUIZ I

Name:

ID:

Objective 1 (Questions 1-3) total 60 points

1) What will be the contents of the variables after the following statements are executed? (20 pts.)

```
int i = 21 / 2 * 2;
```

```
double d = 2 / 3;
```

```
String s = "merhaba" + 4 + 8;
```

```
boolean b1 = (4 > 5) || (6 <= 10);
```

```
boolean b2 = (4 > 5) && (6 <= 10);
```

```
boolean b3 = !(4 > 5) && (6 <= 10);
```

2) What would be the output of the following code? (20 pts.)

```
int x = 10, y = 0;
while (x > 0) {
    y = 0;
    while (y < 10) {
        System.out.println("x = " + x + " y = " + y);
        y += 3;
    }
    x -= 5;
}
```

3) Convert the while loops in Question 2 to for loops. (20 pts.)

Objective 2 (Question 4) 20 points

4) Write a recursive function to calculate the sum of digits in a given integer. (20 pts.)

Objective 3 (Question 4) 20 points

5) Design and implement a class named Cylinder. Initialize its instance variables to the given arguments of its constructor. Implement volume() method for the Cylinder instances. (20 pts.)