Name:_____

10:00-10:50 a.m. Student Identification Number:_____

For this quiz, you are to print the Output that MATHEMATICA gives you for various Input Statements. As the first Input statement, write your Student Identification Number as a decimal without dashes or spaces and set **id** equal to it. Thus, if your Student Identification Number were 123-45-6789, your first Input and Output would look like

```
id = 123456789.
```

1.23456789×10^8

Problem 1. After each of the following four Input statements, print the Output that *Mathematica* yields.

```
f[x_] = x^3 - 9 x^2 + 17 x - (id)^(1 / 6)
```

```
sol = NSolve[ f'[x] == 0, x ]
```

```
critPoints = x /. sol
```

```
{ f[ critPoints ],  f''[ critPoints] }
```

Problem 2. After each of the following two Input statements, print the Output that *Mathematica* yields.

```
Integrate[(id)^(1 / 5) * x * E^x * Sin[2 x] * Cos[3 x], x]
```

```
Integrate[x^13 * ArcTan[x] + Floor[id], x]
```
