```
import scipy.stats as stats
import numpy as np

# Data for three areas
area1 = [6.2, 9.3, 6.8, 6.1, 6.7, 7.5]
area2 = [7.5, 8.2, 8.5, 8.2, 7.0, 9.3]
area3 = [5.8, 6.4, 5.6, 7.1, 3.0, 3.5]

# Perform one-way ANOVA
f_statistic, p_value = stats.f_oneway(area1, area2, area3)

# Calculate means
mean1 = np.mean(area1)
mean2 = np.mean(area2)
mean3 = np.mean(area3)

# Display results

print("ONE-WAY ANOVA TEST")
print('')
print("\nDescriptive Statistics:")
print(f"Area 1 Mean: {mean1:.2f}")
print(f"Area 2 Mean: {mean2:.2f}")
print(f"Area 3 Mean: {mean3:.2f}")

print('')
print("ANOVA Results:")
print('')
print(f"F-statistic: {f_statistic:.4f}")
print(f"P-value: {p_value:.4f}")
print(f"Significance level (α): 0.05")

print('')
print("Decision:")
print('')
if p_value < 0.05:
    print(" Reject the null hypothesis")
    print(" There IS a significant difference in means")
    print("  among the three areas (p < 0.05)")
else:
    print(" Fail to reject the null hypothesis")
    print(" There is NO significant difference in means")
    print("  among the three areas (p ≥ 0.05)")
```

```
ONE-WAY ANOVA TEST


Descriptive Statistics:
Area 1 Mean: 7.10
Area 2 Mean: 8.12
Area 3 Mean: 5.23

ANOVA Results:

F-statistic: 8.1759
P-value: 0.0040
Significance level (α): 0.05

Decision:

 Reject the null hypothesis
 There IS a significant difference in means
  among the three areas (p < 0.05)
```