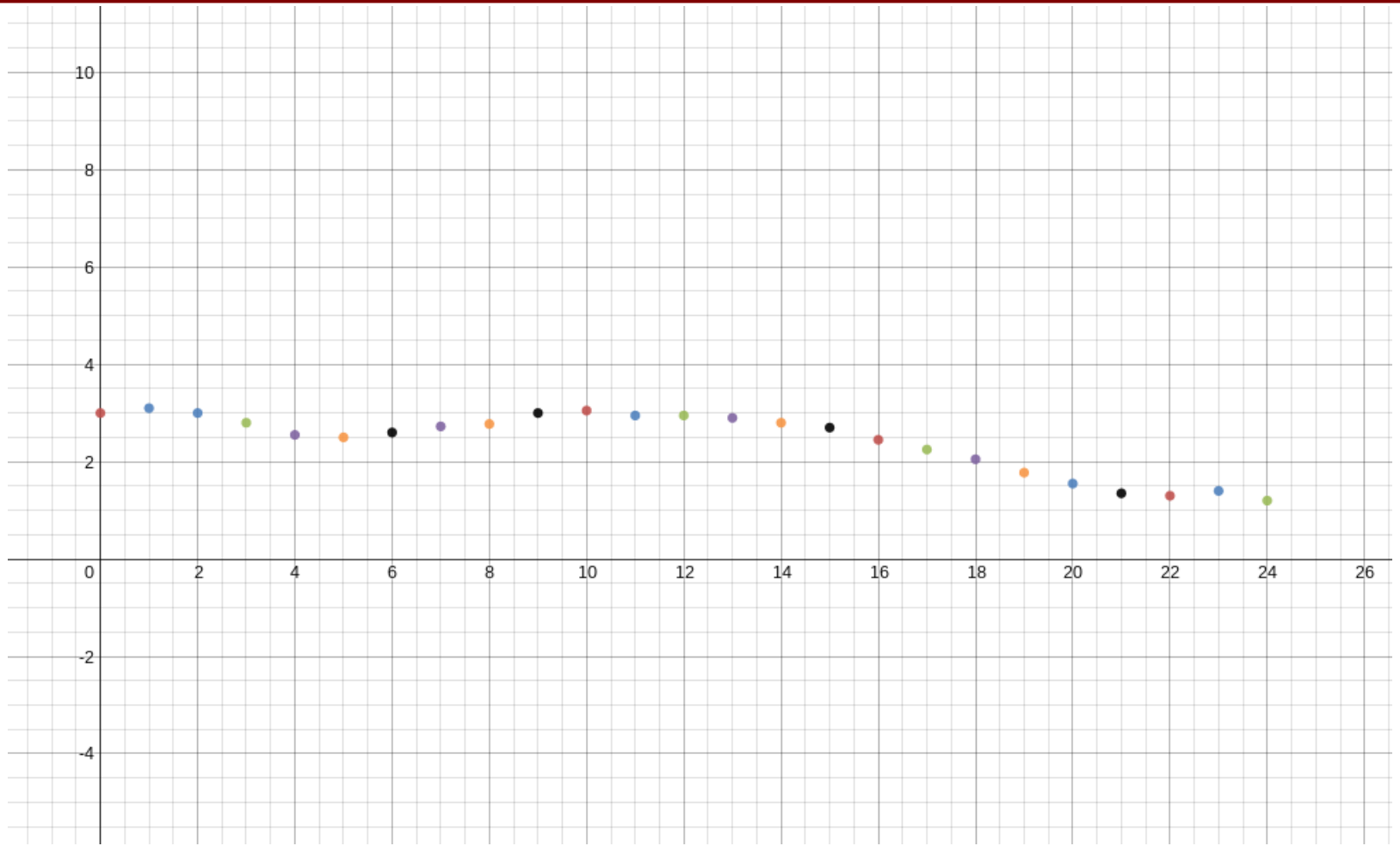
# Solids of Revolution ft. Coke

Micaela and Samantha

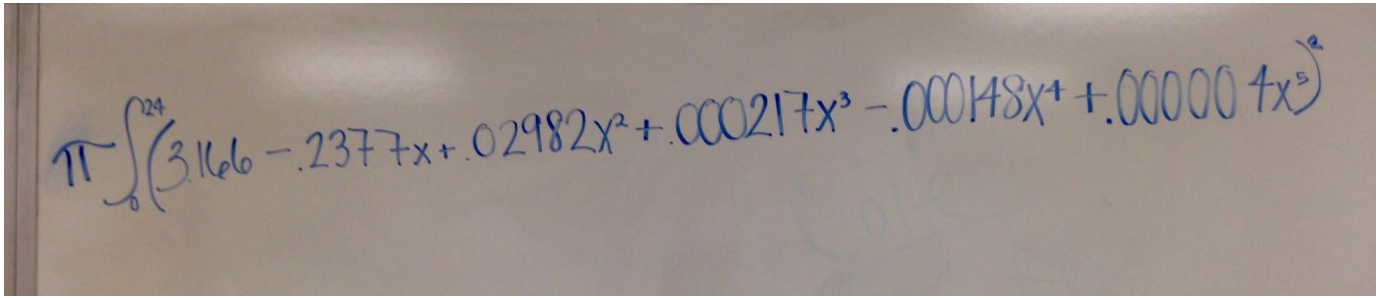
# Data Points

| X (cm) | Y (cm) |
|---|---|
| 0 | 3 |
| 1 | 3.1 |
| 2 | 3 |
| 3 | 2.8 |
| 4 | 2.55 |
| 5 | 2.5 |
| 6 | 2.6 |
| 7 | 2.725 |
| 8 | 2.775 |
| 9 | 3 |
| 10 | 3.05 |
| 11 | 2.95 |
| 12 | 2.95 |
| 13 | 2.9 |
| 14 | 2.8 |
| 15 | 2.7 |
| 16 | 2.45 |
| 17 | 2.25 |
| 18 | 2.05 |
| 19 | 1.775 |
| 20 | 1.55 |
| 21 | 1.35 |
| 22 | 1.3 |
| 23 | 1.4 |
| 24 | 1.2 |

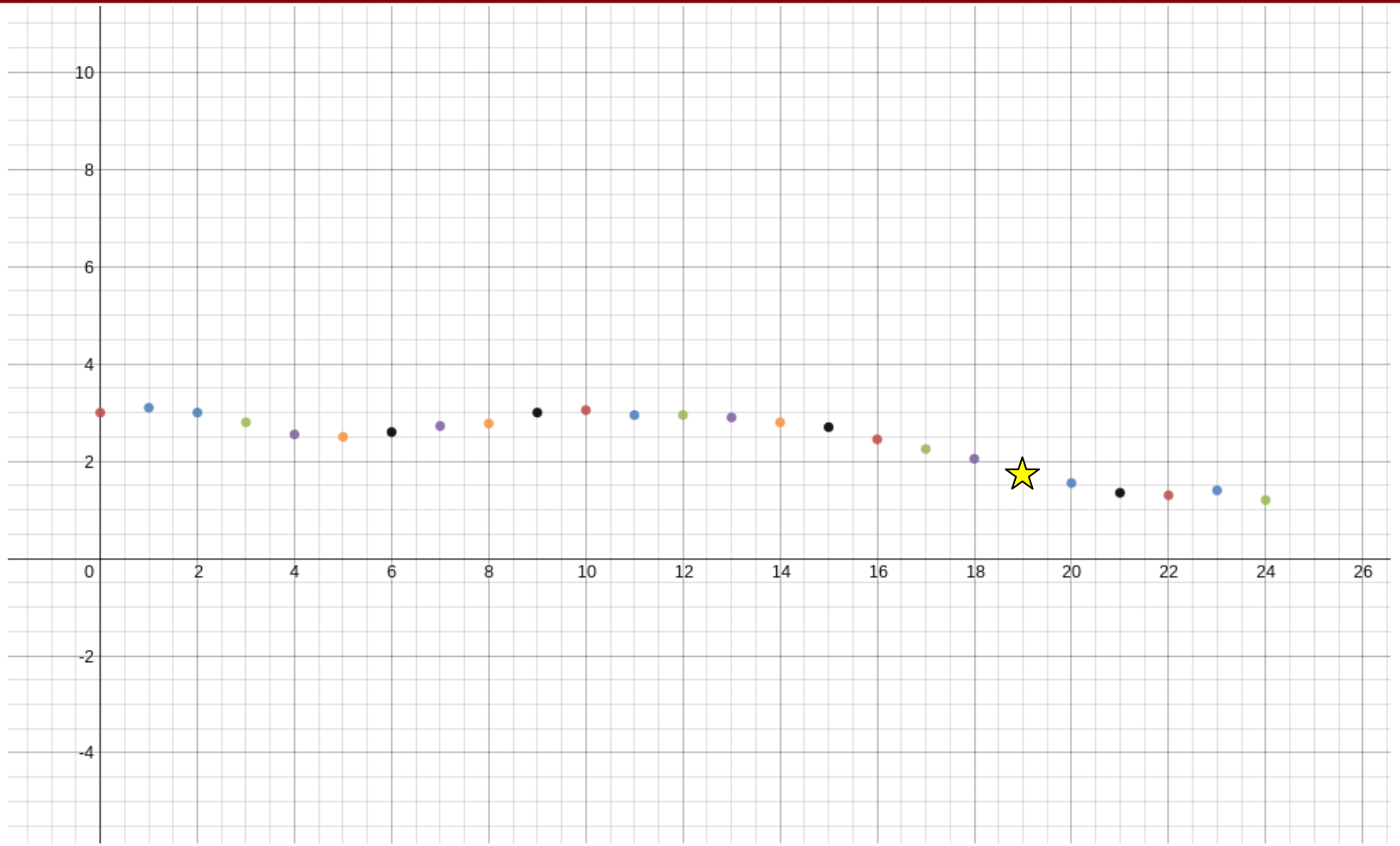

10
8
6
4
2
0
-2
-4
2
4
6
8
10
12
14
16
18
20
22
24
26

# Equation and Integral

y=.000004x^5-.0001481x^4+.0002166x^3+.02982x^2-.2377x+3.166




**V=437.118 mL**


10
8
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4
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10
12
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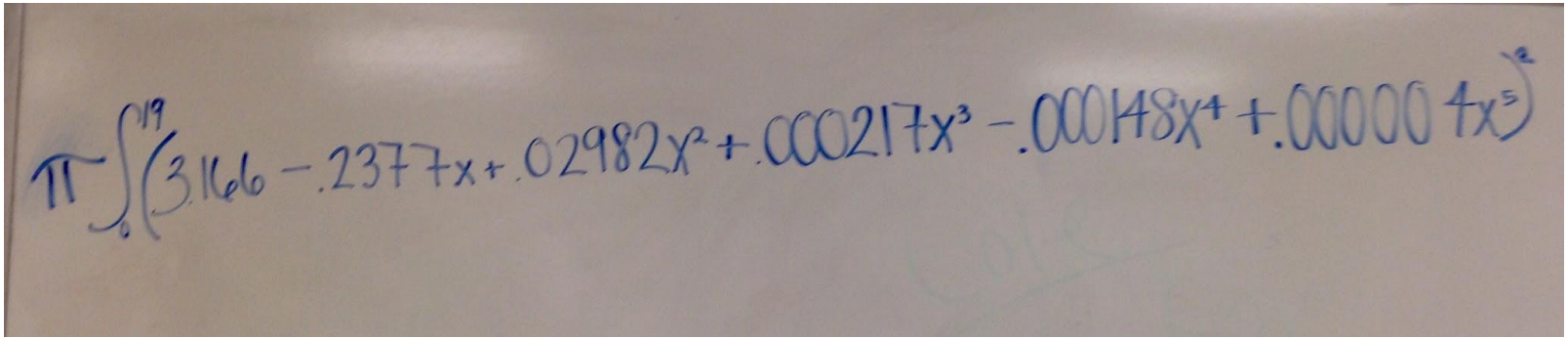
22
24
26

# Equation and Integral

y=.000004x^5-.0001481x^4+.0002166x^3+.02982x^2-.2377x+3.166

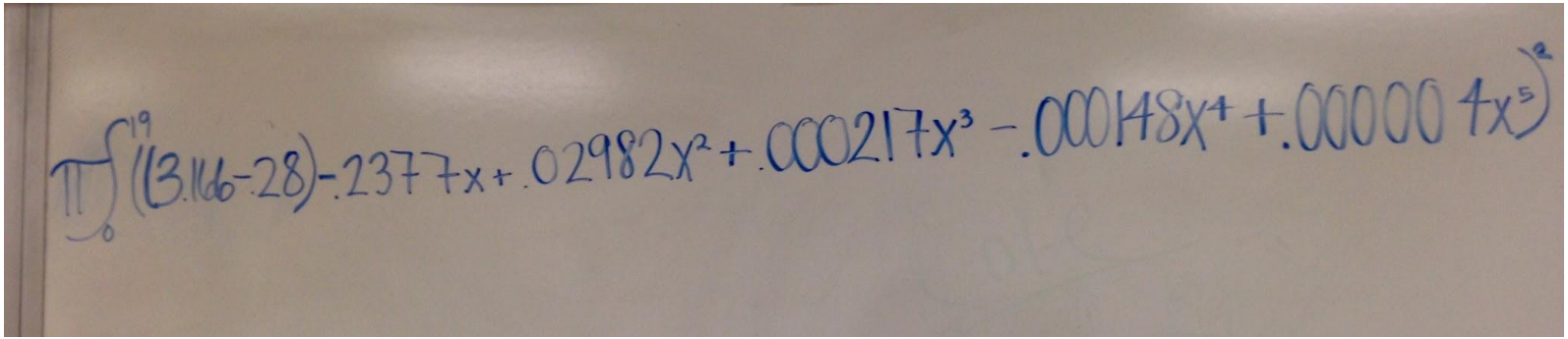



**V=426.654 mL**


8 FL OZ (237 mL)

# Final Equation and Integral

y=.000004x^5-.0001481x^4+.0002166x^3+.02982x^2-.2377x+(3.166-.28)




**V=342.74 mL**

# Percent of Error

% Error= (actual-calculated)/(actual)x100

% Error= (355-342.74)/(355)x100

% Error= 3.45%