

# ■ Python Sales Report Worksheet – Answer Key

## Step 2. Load the Data

```
with open("sales.txt", "r") as file:  
    sales = [int(line.strip()) for line in file]
```

```
print(sales)
```

Answer: The function is int()

## Step 3. Basic Math with Lists

```
print("Total Sales:", sum(sales)) # 3420  
print("Average Sale:", sum(sales) / len(sales)) # 427.5  
print("Highest Sale:", max(sales)) # 780  
print("Lowest Sale:", min(sales)) # 120
```

Answers: Average = 427.5, Largest = max()

## Step 4. Using the statistics Module

```
import statistics
```

```
print("Mean:", statistics.mean(sales)) # 427.5  
print("Median:", statistics.median(sales)) # 395.0  
print("Standard Deviation:", statistics.stdev(sales)) # ~226
```

Answers: Mean > Median. Std Dev shows wide spread.

## Step 5. Organize with Pandas

```
df = pd.DataFrame(sales, columns=["Sales"])  
print(df.describe())
```

Answer: The function is describe(). Count = 8 entries.

## Step 6. Create a Chart

```
plt.plot(sales, marker="o")  
plt.title("Sales Report")  
plt.xlabel("Transaction")  
plt.ylabel("Sales Amount")  
plt.grid(True)  
plt.show()
```

Answers: Bar chart uses plt.bar(). Add grid lines with plt.grid(True).

## Step 7. Extend Your Exploration

```
sorted(sales)
[s for s in sales if s > 500]
sales.append(900)
```

Answer: Sorted list, filtered list, appended new value.