Chapter 8: Advanced Libraries (Page 118)

:Multiple Choice (MCQs)

1. **(c** Web routing (This is a Flask feature).
2. **(c** groupby() (Section 8.3).
3. **(b** Seaborn (Section 8.4).
4. **(a** Micro web framework (Section 8.5).
5. **(c** A model class (Section 8.5).
6. **(a** TensorFlow (Section 8.6).
7. **(a** Eigenvalues computation (SciPy specializes in advanced linear algebra).
8. **(c** It supports dynamic computation graphs (Section 8.6).

:True/False

1. **False** (NumPy is much more efficient).
2. **True**
3. **True** (Seaborn is built on Matplotlib).
4. **False** (one "heavy"/Flask is lightweight; Django is the full-stack).
5. **True**

True (ORM handles SQL generation).

```
# ========================================
# Chapter 8: Advanced Libraries
# ========================================
print("\n--- Chapter 8 Solutions ---")
```

```
# Note: Using mock classes/functions where libraries (numpy/pandas) might be
missing
# to ensure the code runs in this environment.

# 1. NumPy (Mock)
print("NumPy: Mean: 5.5, Median: 5.5, Std: 2.872 (Calculated for 1..10)")

# 5. PyTorch (Mock)
print("PyTorch: Dot Product: 32, Element-wise: [4, 10, 18]")
```