#### CONTENTS

# Introduction, 1

#### 2

The Nature of Mathematics, 4

1. Introduction, 4; 2. Logical Truths, 6; 3. The Reduction of Mathematics, 8; 4. The Linguistic Theory of Logical Truth, 9; 5. Logic and Mathematics, 11; 6. Truth by Convention, 14; 7. Mathematics and Science, 16.

#### 3

Explanation, 24

1. Introduction, 24; 2. The "Humean" Account, 27; 3. Inductive-Statistical Explanation, 30; 4. Laws and Conditional Statements, 37; 5. Explanation and Prediction, 45; 6. Teleological Explanation, 51; 7. Explanation and Reduction, 60.

### 4

Confirmation and Acceptability, 67

1. Introduction, 67; 2. Acceptability and Confirmation, 68; 3. The "Paradoxes" of Confirmation, 76; 4. Are Laws of Nature True or False? 88.

## 5

The Limits of Science, 92

1. Introduction, 92; 2. Determinism and Explanation, 94; 3. Reduction and Explanation, 100; 4. Description and Explanation, 106.

Index, 111