

Australian Standard[®]

QUANTITIES, UNITS, AND SYMBOLS

**Part 11—MATHEMATICAL SIGNS
AND SYMBOLS FOR
USE IN THE PHYSICAL
SCIENCES AND
TECHNOLOGY**

This Australian standard was prepared by Committee MS/10, Quantities, Units and Conversions. It was approved on behalf of the Council of the Standards Association of Australia on 27 February 1986 and published on 7 April 1986.

The following interests are represented on Committee MS/10:

Australian Institute of Physics
Bureau of Steel Manufacturers of Australia
CSIRO, Division of Applied Physics
Department of Defence
Department of Science
Electricity Commission of New South Wales
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PREFACE

This standard was prepared by the Association's Committee on Quantities, Units and Conversions. It is identical with and has been reproduced from International Standard ISO 31/11, Mathematical Signs and Symbols for Use in the Physical Sciences and Technology.

This standard is one of a series of 14 standards on quantities, units and symbols, and, where appropriate, conversion factors. The other standards in the series are as follows:

- AS 2900.0 Quantities, Units, and Symbols, Part 0—General Principles Concerning Quantities, Units, and Symbols
- AS 2900.1 Quantities, Units, and Symbols, Part 1—Quantities and Units of Space and Time
- AS 2900.2 Quantities, Units, and Symbols, Part 2—Quantities and Units of Periodic and Related Phenomena
- AS 2900.3 Quantities, Units, and Symbols, Part 3—Quantities and Units of Mechanics
- AS 2900.4 Quantities, Units, and Symbols, Part 4—Quantities and Units of Heat
- AS 2900.5 Quantities, Units, and Symbols, Part 5—Quantities and Units of Electricity and Magnetism
- AS 2900.6 Quantities, Units, and Symbols, Part 6—Quantities and Units of Light and Related Electromagnetic Radiations
- AS 2900.7 Quantities, Units, and Symbols, Part 7—Quantities and Units of Acoustics
- AS 2900.8 Quantities, Units, and Symbols, Part 8—Quantities and Units of Physical Chemistry and Molecular Physics
- AS 2900.9 Quantities, Units, and Symbols, Part 9—Quantities and Units of Atomic and Nuclear Physics
- AS 2900.10 Quantities, Units, and Symbols, Part 10—Quantities and Units of Nuclear Reactions and Ionizing Radiations
- AS 2900.12 Quantities, Units, and Symbols, Part 12—Dimensionless Parameters
- AS 2900.13 Quantities, Units, and Symbols, Part 13—Quantities and Units of Solid State Physics

For the purpose of this Australian standard, the text of the ISO standard used herein should be modified as follows:

The references to International Standards should be replaced by references to Australian Standards as follows:

<i>Reference to International Standard</i>	<i>Appropriate Australian Standard</i>
ISO 31, Part 0: General principles concerning quantities, units and symbols	AS 2900.0, Quantities, Units and Symbols, Part 0—General Principles Concerning Quantities, Units and Symbols
ISO 31, Part 1: Quantities and units of space and time	AS 2900.1, Quantities, Units, and Symbols, Part 1—Quantities and Units of Space and Time
ISO 31, Part 2: Quantities and units of periodic and related phenomena	AS 2900.2, Quantities, Units, and Symbols, Part 2—Quantities and Units of Periodic and Related Phenomena
ISO 31, Part 3: Quantities and units of mechanics	AS 2900.3, Quantities, Units, and Symbols, Part 3—Quantities and Units of Mechanics
ISO 31, Part 4: Quantities and units of heat	AS 2900.4, Quantities, Units, and Symbols, Part 4—Quantities and Units of Heat
ISO 31, Part 5: Quantities and units of electricity and magnetism	AS 2900.5, Quantities, Units, and Symbols, Part 5—Quantities and Units of Electricity and Magnetism
ISO 31, Part 6: Quantities and units of light and related electromagnetic radiations	AS 2900.6, Quantities, Units, and Symbols, Part 6—Quantities and Units of Light and Related Electromagnetic Radiations

ISO 31, Part 7: Quantities and units of acoustics	AS 2900.7, Quantities, Units, and Symbols, Part 7—Quantities and Units of Acoustics
ISO 31, Part 8: Quantities and units of physical chemistry and molecular physics	AS 2900.8, Quantities, Units, and Symbols, Part 8—Quantities and Units of Physical Chemistry and Molecular Physics
ISO 31, Part 9: Quantities and units of atomic and nuclear physics	AS 2900.9, Quantities, Units, and Symbols, Part 9—Quantities and Units of Atomic and Nuclear Physics
ISO 31, Part 10: Quantities and units of nuclear reactions and ionizing radiations	AS 2900.10, Quantities, Units, and Symbols, Part 10—Quantities and Units of Nuclear Reactions and Ionizing Radiations
ISO 31, Part 11: Mathematical signs and symbols for use in physical sciences and technology	AS 2900.11, Quantities, Units, and Symbols, Part 11—Mathematical Signs and Symbols for Use in the Physical Sciences and Technology
ISO 31, Part 12: Dimensionless parameters	AS 2900.12, Quantities, Units, and Symbols, Part 12—Dimensionless Parameters
ISO 31, Part 13: Quantities and units of solid state physics	AS 2900.13, Quantities, Units, and Symbols, Part 13—Quantities and Units of Solid State Physics

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QUANTITIES, UNITS, AND SYMBOLS

PART 11—MATHEMATICAL SIGNS AND SYMBOLS FOR USE IN THE PHYSICAL SCIENCES AND TECHNOLOGY

INTRODUCTION

This document, containing a table of *mathematical signs and symbols for use in the physical sciences and technology*, is part XI of ISO 31, which deals with quantities and units in the various fields of science and technology. The complete list of parts of ISO 31 is as follows:

Part 0: *General introduction — General principles concerning quantities, units and symbols.*

Part I: *Quantities and units of space and time.*

Part II: *Quantities and units of periodic and related phenomena.*

Part III: *Quantities and units of mechanics.*

Part IV: *Quantities and units of heat.*

Part V: *Quantities and units of electricity and magnetism.*

Part VI: *Quantities and units of light and related electromagnetic radiations.*

Part VII: *Quantities and units of acoustics.*

Part VIII: *Quantities and units of physical chemistry and molecular physics.*

Part IX: *Quantities and units of atomic and nuclear physics.*

Part X: *Quantities and units of nuclear reactions and ionizing radiations.*

Part XI: *Mathematical signs and symbols for use in the physical sciences and technology.*

Part XII: *Dimensionless parameters.*

Part XIII: *Quantities and units of solid state physics.*

Special remarks

The recommendations in this document are prepared mainly for use in the physical sciences and technology.

If more than one sign, symbol or expression is given under the same item, they are on an equal footing. Signs, symbols and expressions in the remarks column are given for information.