Basic mathematical symbols and structures

## Basic mathematical symbols and structures

Emma Cliffe

### [Contents](#x1-1000)

1 [Standard mathematical symbols](#x1-40001)  
2 [Standard mathematical structures](#x1-50002)  
 2.1 [Testing line breaking](#x1-60002.1)  
 2.2 [Testing new commands](#x1-70002.2)

### [List of Figures](#x1-2000)

### [List of Tables](#x1-3000)

### 1 [Standard mathematical symbols](#QQ2-1-4)

We will use the robust single dollar environment for these

Math versions of text symbols:

Keyboard symbols:

But for longer tests we will use the equation environment so that we don’t overrun the line if we increase the font size. We’ll do a basic macro test in section [2.2](#x1-70002.2).

Greek:

|  |  |
| --- | --- |
|  | (1) |

Upper case Greek:

|  |  |
| --- | --- |
|  | (2) |

Normal, lower case:

|  |  |
| --- | --- |
|  | (3) |

Normal, upper case:

|  |  |
| --- | --- |
|  | (4) |

Bold using boldmath, lower case:

|  |  |
| --- | --- |
|  | (5) |

Bold using boldmath, upper case:

|  |  |
| --- | --- |
|  | (6) |

Italic, lower case:

|  |  |
| --- | --- |
|  | (7) |

Italic, upper case:

|  |  |
| --- | --- |
|  | (8) |

Roman, lower case:

|  |  |
| --- | --- |
|  | (9) |

Roman, upper case:

|  |  |
| --- | --- |
|  | (10) |

Bold using bf, lower case:

|  |  |
| --- | --- |
|  | (11) |

Bold using bf, upper case:

|  |  |
| --- | --- |
|  | (12) |

Calligraphic (upper case only):

|  |  |
| --- | --- |
|  | (13) |

Binary operators:

|  |  |
| --- | --- |
|  | (14) |

Relations:

|  |  |
| --- | --- |
|  | (15) |

Negated which do not stop conversion but may not be displayed in Word:

|  |  |
| --- | --- |
|  | (16) |

Arrows:

|  |  |
| --- | --- |
|  | (17) |

|  |  |
| --- | --- |
|  | (18) |

Other:

|  |  |
| --- | --- |
|  | (19) |

Symbols with two sizes:

|  |  |
| --- | --- |
|  | (20) |

Function names:

|  |  |
| --- | --- |
|  | (21) |

|  |  |
| --- | --- |
|  | (22) |

|  |  |
| --- | --- |
|  | (23) |

Those with under-subscript available:

|  |  |
| --- | --- |
|  | (24) |

Modulus:

|  |  |
| --- | --- |
|  | (25) |

Accents and under/over:

|  |  |
| --- | --- |
|  | (26) |

Symbols left and right can be applied to:

|  |  |
| --- | --- |
|  | (27) |

Manual sizing:

|  |  |
| --- | --- |
|  | (28) |

|  |  |
| --- | --- |
|  | (29) |

|  |  |
| --- | --- |
|  | (30) |

|  |  |
| --- | --- |
|  | (31) |

Dots:

|  |  |
| --- | --- |
|  | (32) |

Horizontal spacing:

|  |  |
| --- | --- |
|  | (33) |

### 2 [Standard mathematical structures](#QQ2-1-5)

Three different ways to inline

Four different ways to displaymath.

|  |  |
| --- | --- |
|  | (100) |

One of the forms is numbered equation [100](#x1-5001r100).

Now for an equation array:

#### 2.1 [Testing line breaking](#QQ2-1-6)

#### 2.2 [Testing new commands](#QQ2-1-7)