

We can include in-line math by surrounding it with the dollar-sign (\$). For example, commutative addition may be expressed as $a + b = b + a$. We can express fractions using `frac`, as in $\frac{a}{b}$. Subscripts such as a_b and superscripts like a^b are possible; and subscript expressions a_{n+1} or b^{n-1} .

Following is the equation for the sum of numbers from 1 to n :

$$\sum_1^n i = \frac{n(n+1)}{2}. \quad (1)$$

Following is the power rule for integration. If we place the equation in escaped brackets instead of the `equation` environment, it does not number the equation:

$$\int x^r dx = \frac{x^{r+1}}{r+1} + C.$$

Power rule for differentiation, in-line: $\frac{d}{dx}x^r dx = rx^{r-1}$. Also, there is a `verbatim` environment that we can use for code:

```
#include <iostream>

int sum(int n) {
    return n*(n+1)/2;
}

int main() {
    std::cout << sum(100) << std::endl;
}
```

In addition, we can use the Greek alphabet: α , β , θ , Σ , Π , etc. can easily be referred to by name.