

1 Three Ways to Display an Equation

There are several ways to display an equation. They are equivalent- they are shown here so that you'll recognize them when they come up.

Double dollar sign: $\$ \$ \dots \$ \$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Begin and end an equation environment (this numbers the equation):

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \tag{1}$$

Brackets: $\backslash[\dots \backslash]$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

2 Figures: Create, Label and Reference

Have the figure file in the same folder as the tex file. For this example, download the figure clown.jpg from the class website.

2.0.1 Very Basic Example:



We'll always incorporate a figure into a figure environment, that allows for captioning, labelling, referencing. Here is an example:

Back in the text, we can now reference the figure (see Figure 1).

3 Label and reference an equation

Here's the equation:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \tag{2}$$

In the text, if I now want to refer to the formula (see Equation 2).



Figure 1: The photo of a famous clown.

3.1 Example: Label and reference a section

4 Formulas

In the text, now refer to back (see, for example, Section 4). This is a reference back to Section 2.0.1.