

HINGE LOSS

Class labels are +1 and -1

$$L_{\text{Hinge}}(y, w) = \max \{ 1 - wy, 0 \}$$

Diagram illustrating the Hinge Loss formula:

- y (green) is labeled "True y" with a green arrow.
- w (orange) is labeled "Raw output of classifier" with an orange arrow.
- y (green) is labeled "True y" with a green arrow.

Used in support vector classifiers. When y and w have the same sign and $|w| \geq 1$ then Hinge Loss is 0. Otherwise, Hinge Loss increases as w increases.