# Personal Library of LaTeX Code

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## 1 Section Header

#### 1.1 Subsection Header

#### 1.1.1 Subsubsection Header

### **1.1.1.1** Paragraph Label subequations as (1a, 1b ...)

$$P_c = 5 \,\mathrm{mSv/yr} = 0.1 \,\mathrm{mSv/wk} \tag{1a}$$

$$P_u = 1 \,\mathrm{mSv/yr} = 0.02 \,\mathrm{mSv/wk}. \tag{1b}$$

Scientific notation in math type  $4.997 \times 10^9$  and in text  $3.545 \times 10^7$ 

Highlight text red for editing purposes.

Table 1: A sample table with caption above.

Parameter	Value	Unit	Description
$d_{pri}$	$6.71 \pm 0.01$	m	distance from source to 1 m past the primary barrier
$d_{sec}$	$4.88 \pm 0.01$	m	distance from source to 1 m past the secondary barrier
$d_{sca}$	$1.0 \pm 0.01$	m	distance from source to phantom
$\dot{X}_U$	$2458 \pm 4$	R/hr	unattenuated exposure rate 1 m from the source
$\dot{X}_S$	$1520 \pm 100$	mR/hr	scattered exposure rate 1 m from patient surface
$\dot{X}_L$	$1800 \pm 300$	$\mu R/hr$	exposure rate due to leakage 1 m from the source
$S_p$	to be determined	m	thickness of primary barrier
$S_s$	to be determined	m	thickness of secondary barrier

The following are examples of canceling terms.

$$x + 5 \hat{y} = 0$$

\bcancel{5y}:

$$x + \Im y = 0$$

 $\xcancel{5y}:$ 

$$x + \mathcal{Y} = 0$$

 $\color= \color= \col$ 

$$x + 5\cancel{y}^{\infty} = 0$$

 $\color{0}{5y}:$ 

$$x + 5\cancel{y}^0 = 0$$

\cancelto{}{5y}:

$$x + 5 \cancel{y} = 0$$

The first three commands work in text mode also i.e., 5%, 5% and 3%. But \cancelto{\infty}{5y} and other 'cancelto' forms do not.

A reference in the text [?]. Reference 2 is not cited in the text but appears in the reference section.

## References

- NCRP Report 151. Structural shielding design and evaluation for megavoltage x- and gamma-ray radiotherapy facilities. Technical report, National Council on Radiation Protection and Measurements, 2005.
- [2] NCRP Report 49. Structural Shielding Design and Evaluation for Medical Use of X-rays and Gamma Rays of Energies up to 10 MeV. Technical report, National Council on Radiation Protection and Measurements, 1976.