

# Correction Spacings: eqnarray(\*), aligned, alignedat, and gathered

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2017/04/02 v1.0

## 1 Descriptions

We will realignment some expression environments spacing. It is a correction in the horizontal spacing of the alignment.

## 2 Usage

### 2.1 Preamble

```
\usepackage{amsmath}  
\usepackage{correctmathalign}
```

Remark: amsmath package is optional: if you use aligned, alignedat, or gathered environments.

### 2.2 Options

- `latexorg`: original behavior of LaTeX/amsmath package
- `fleqn`: corresponds to class file and/or amsmath package's fleqn option

## 3 File with Original Definitions

- `eqnarray`: latex.ltx
- `\start@aligned` and `gathered`: amsmath.sty

## 4 License

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$$\begin{array}{l} I = H(x+1) \\ I = H(x) \\ I = H(x+1) \end{array}$$

Figure 1: `eqnarray*` environment  
by `LATEX` default.

$$\begin{array}{l} I = H(x) \\ \quad = H(x+1) \\ I = H(x) \\ \quad = H(x+1) \end{array}$$

Figure 2: `aligned` environment  
by `amsmath.sty` default.

## 5 Samples

Cf. defaults of `LATEX` and `amsmath.sty` (Figures 1 and 2).

$$I = H(x+1)$$

$$\begin{array}{l} I = H(x) \\ \quad = H(x+1) \end{array}$$

$$\begin{array}{l} I = H(x) \\ \quad = H(x+1) \end{array}$$

$$\begin{array}{l} I = H(x) \\ \quad = H(x+1) \end{array}$$

### 5.1 Use `LATEX` code

```
\[
\mathrm{I} = \mathrm{H}(x + 1)
\]
\begin{eqnarray*}
\mathrm{I} &=& \mathrm{H}(x)\\
&=& \mathrm{H}(x + 1)
\end{eqnarray*}

\begin{align*}
\mathrm{I} & \begin{aligned}[t]
&= \mathrm{H}(x)\\
&= \mathrm{H}(x + 1)
\end{aligned}
\end{align*}
```