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

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1 Descriptions

We will fix 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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$$\mathrm{I} = \mathrm{H}(x+1)$$
$$\begin{array}{rcl}\mathrm{I} &=& \mathrm{H}(x)\\ &=& \mathrm{H}(x+1)\end{array}$$

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

$$\begin{aligned}\mathrm{I} &= \mathrm{H}(x)\\ &= \mathrm{H}(x+1)\end{aligned}$$
$$\begin{aligned}\mathrm{I} &= \mathrm{H}(x)\\ &= \mathrm{H}(x+1)\end{aligned}$$

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

5 Samples

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

$$\mathrm{I} = \mathrm{H}(x+1)$$

$$\begin{aligned}\mathrm{I} &= \mathrm{H}(x)\\ &= \mathrm{H}(x+1)\end{aligned}$$

$$\begin{aligned}\mathrm{I} &= \mathrm{H}(x)\\ &= \mathrm{H}(x+1)\end{aligned}$$

$$\begin{aligned}\mathrm{I} &= \mathrm{H}(x)\\ &= \mathrm{H}(x+1)\end{aligned}$$

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}\\
 \mathrm{I} &= \mathrm{H}(x)\\
          &= \mathrm{H}(x + 1)
\end{align*}
```