Normal Usage

$$\begin{array}{rcl} a & = & b+c \\ d & = & e+f+g \end{array}$$

gather alternative (single column misuse)

$$a = b + c$$
$$d = e + f + g$$

$$a = b + c$$
$$d = e + f + g$$

$$a = b + c$$
$$d = e + f + g$$

Awkward continuations

$$a = b + c$$
$$= e + f + g$$

$$a = b + c$$
$$= e + f + g$$

$$a = b + c$$
$$= e + f + g$$