$$\begin{aligned} AB \\ C \{ D \end{aligned}$$

Equation with split; Ampersand before relation

$$\begin{aligned} C &= D \\ &+ E \end{aligned} \tag{1}$$

or after

$$\begin{aligned} C &= D \\ &+ E \end{aligned} \tag{2}$$

Gather with split

$$A = B \tag{3}$$

$$\begin{aligned} C &= D \\ &+ E \end{aligned} \tag{4}$$

$$F = G \tag{5}$$

Align with split. Notice that the split acts like a column pair in the align.

$$A = B \tag{6}$$

$$\begin{aligned} C &= D \\ &+ E \end{aligned} \tag{7}$$

$$F = G \tag{8}$$

$$H = I \tag{9}$$

2-Column align, with missing columns

$$A = B \qquad C = D \tag{10}$$

$$E = F \tag{11}$$

$$H = I \qquad J = K \tag{12}$$

2-Column align with split; Note that you should omit double slash from last line of split!

$$A = B \qquad C = D \tag{13}$$

$$\begin{aligned} E &= F \\ &+ G \end{aligned} \tag{14}$$

$$H = I \qquad J = K \tag{15}$$

$$A = B \qquad C = D \tag{16}$$

$$X = Y \qquad \begin{aligned} E &= F \\ &\quad + G \end{aligned} \tag{17}$$

$$H = I \qquad J = K \tag{18}$$

$$\begin{aligned} L &= M \\ &\quad + N \end{aligned} \qquad O = P \tag{19}$$

$$Q = R \qquad S = T \tag{20}$$

Multiple splits in multicolumn align. Note how each split block contributes to a single row, but it is horizontally aligned as if it were a column pair in the align.

$$A = B + b + c + d \qquad C = D \tag{21}$$

$$E + e + f + g = F \qquad \begin{aligned} L &= M \\ &\quad + N \\ &\quad + Z \end{aligned} \tag{22}$$

$$\begin{aligned} &\quad + G \\ Q &= R \end{aligned} \qquad S = T \tag{23}$$