1. We "pull out" each of the operands of $E = (u + v) + ((w + (x + y)) + z)$. We perform this arbitrarily from left to right.

By the associative law, E can be transformed into $u + (v + ((w + (x + y)) + z))$. Thus we have $E = u + E_1$ where $E_1 = v + ((w + (x + y)) + z)$. We trivially pull out v from E_1 to get an expression of the form $v + E_2$ where $E_2 = (w + (x + y)) + z$. With the associative law we transform E_2 into an expression of the form $w + E_3$ where $E_3 = (x + y) + z$. Similarly we transform E_3 into an expression of the form $x + E_4$ where $E_4 = y + z$. We transform E_4 into an expression of the form $y + E_5$ where $E_5 = z$. The sequence of transformations is

$$
\begin{aligned}
&(u + v) + ((w + (x + y)) + z)\\
&u + (v + ((w + (x + y)) + z))\\
&u + (v + (w + ((x + y) + z)))\\
&u + (v + (w + (x + (y + z)))).
\end{aligned}
$$

2. We transform $E = w + (x + (y + z))$ into $F = ((w + x) + y) + z$. We do so by "pulling out" one operand a from both expressions, which are equivalent, and then repeating with the next operand until none are left.

We first choose to "pull out" w from both expressions first. This is already so for E. For F we follow the sequence

$$((w + x) + y) + z \to (w + (x + y)) + z \to w + ((x + y) + z).$$

Now to transform $E_1 = x + (y + z)$ into $F_1 = (x + y) + z$. We "pull out" x which is already accomplished for E_1. For F_1 we perform the transformation

$$(x + y) + z \to x + (y + z).$$

We "pull out" y next from $E_2 = y + z$ and $F_2 = y + z$. This is done so trivially.

We now transform what is left of the expressions E_2 and F_2 without y. Consider the expressions $E_3 = z$ and $F_3 = z$. E_3 naturally transforms into F_3. Furthermore, $E_2 = y + E_3$ can transform into $F_2 = y + F_3$, and $E_1 = x + E_2$ can transform into $F_1 = x + F_2$.