

## Possible Solutions

Write an equivalent expression for the one shown below.

$$2x + 2(x + 1)$$

- To solve this problem, students need to simply begin simplifying the expression, reducing it down to one step as an equivalent expression (the step before getting a solution).
- This is done by following a series of steps.
  1. First, students would need to get rid of the parenthesis in this expression using distribution. To do so, they must
    - a. Multiply 2 by  $x$  which gives them  $2x$
    - b. Multiply 2 by  $+1$  which gives them  $+2$
    - c. This results in  $2x + 2$  in place of  $2(x + 1)$
  2. Next, students return to the beginning of the expression and write the new form.
    - a.  $2x + 2x + 2$
  3. Then, they combine like terms, in this case,  $2x$ 
    - a. They combine  $2x + 2x$  to get  $4x$ .
  4. The result, or equivalent expression would be  $4x + 2$ .