CSC324 - Racket Continuations

For each expression, give the continuation (in function form) of the specified subexpression.

1. Continuation of (+ 1 2) in
   \( (g \text{ "yo"} \ (+ \ 1 \ 2) \ (+ \ 3 \ 4)) \)

2. Continuation of (+ 3 4) in
   \( (g \text{ "yo"} \ (+ \ 1 \ 2) \ (+ \ 3 \ 4)) \)

3. Continuation of 3 in
   \( (g \text{ "yo"} \ (+ \ 1 \ 2) \ (+ \ 3 \ 4)) \)
   (Yes, numbers and other literals are also expressions, and so have continuations!)

4. Continuation of g in
   \( (g \text{ "yo"} \ (+ \ 1 \ 2) \ (+ \ 3 \ 4)) \)
   (Function names are themselves expressions, and so have continuations. **Tricky**: a function is *evaluated* before it is called, and even before all of its arguments are evaluated!)

5. Continuation of \((g \text{ "yo"} \ (+ \ 1 \ 2) \ (+ \ 3 \ 4))\) in
   \( (g \text{ "yo"} \ (+ \ 1 \ 2) \ (+ \ 3 \ 4)) \)
   (The whole expression itself also has a continuation.)

6. (A bit different) Continuation of (f 1 2) in
   \( \begin{array}{l}
   \text{let } ([x (f \ 1 \ 2)]
   \quad [y 10])
   \quad (+ \ x \ y))
   \end{array} \)