Questions 1

Question 1

1/1 point (graded)

Let's write a step-by-step evaluation of the following program:

```
(define (foo x)
  (local [(define (bar y) (+ x y))]
    (+ x (bar (* 2 x)))))

(list (foo 2) (foo 3))
```

What is the result of the first step of the evaluation?

○
```
(define (foo 2)
  (local [(define (bar y) (+ 2 y)]
    (+ 2 (bar (* 2 2)))))
```

⦿
```
(list
  (local [(define (bar y) (+ 2 y)]
    (+ 2 (bar (* 2 2))))
  (foo 3))
```

○
```
(list (+ 2 (bar (* 2 2)))
      (foo 3))
```

✔

Explanation

First we replace the function call expression (`foo 2`) in (`list (foo 2) (foo 3)`) with the body of the function in which every occurence of the paramater x has been replaced by the argument 2.

[Submit]

ⓘ   Answers are displayed within the problem