

Questions 4-6

Question 4

1 point possible (graded)

What is the next step in the following evaluation?

Step 0: $(/ (* 3 4) (+ (- 7 4) 3))$

Step 1: $(/ 12 (+ (- 7 4) 3))$

Step 2: _____

Answer: $(/ 12 (+ 3 3))$

Explanation

The second operand to $/$ is an expression, so it must be evaluated. And the first operand to $+$ is an expression, so it must be evaluated. All of the operands to $-$ are values, so $-$ can be called with 7 and 4 as arguments. This replaces the $-$ call expression with 3.

Question 5

1 point possible (graded)

What is the next step in the following evaluation?

Step 0: $(/ (* 3 4) (+ (- 7 4) 3))$

Step 1: $(/ 12 (+ (- 7 4) 3))$

Step 2: $(/ 12 (+ 3 3))$

Step 3: _____

Answer: $(/ 12 6)$

Explanation:

All of the operands to $+$ have been evaluated, so $+$ can be called with the arguments 3 and 3.

Question 6

1 point possible (graded)

What is the next step in the following evaluation?

Step 0: $(/ (* 3 4) (+ (- 7 4) 3))$

Step 1: $(/ 12 (+ (- 7 4) 3))$

Step 2: $(/ 12 (+ 3 3))$

Step 3: $(/ 12 6)$

Step 4: _____

Answer: 2

Explanation:

All of the operands to $/$ have been evaluated, so the primitive can be called with the arguments 12 and 6.