## Check for Mistakes in this Word Problem: offscreen?

Directions: Write a function, offscreen?, which returns true if Sam the butterfly's x-coordinate is less than -50 or greater than 690.

| Contrac   | Contract and Purpose Statement |               |                     |           |             |             |                       |                            |             |                            |           |      |      |     |
|---|--------------------------------|---------------|---------------------|-----------|-------------|-------------|-----------------------|----------------------------|-------------|----------------------------|-----------|------|------|-----|
| Every contract has three parts                                      |                                |               |                     |           |             |             |                       |                            |             |                            |           |      |      |     |
| ; offs  | offscreen? :                   |               |                     |           | number      |             |                       |                            |             | $\rightarrow$              | → boolean |      |      |     |
| function name   |                                |               |                     | domain    |             |             |                       |                            |             |                            | range     |      |      |     |
| ; Given   | an                             | ı x-          | coordinate          | , ret     | urns        | tru         | e i                   | if                         | the         | coordinate                 | is        | less | than | -50 |
| what does the function do?  |                                |               |                     |           |             |             |                       |                            |             |                            |           |      |      |     |
| Example   | es                             |               |                     |           |             |             |                       |                            |             |                            |           |      |      |     |
| Write some exa  | mple                           | s, then       | circle and label wh | at change | 2S          |             |                       |                            |             |                            |           |      |      |     |
| (EXAMPLE  | (                              | offscreen?    |                     |           | 60          |             | )                     | (                          | true)       |                            |           |      |      | )   |
|   |                                | function name |                     |           | input(s)    |             |                       | what the function produces |             |                            |           |      |      |     |
| (EXAMPLE  | (                              | offscreen?    |                     |           | 800         |             | )                     | (                          | false       | )                          |           |      |      | )   |
|   |                                | fu            | nction name         | input(s)  |             |             | what the function pro |                            |             | what the function produces |           |      |      |     |
| Definition  | n                              |               |                     |           |             |             |                       |                            |             |                            |           |      |      |     |
| Write the definition, given variable names to all your input values |                                |               |                     |           |             |             |                       |                            |             |                            |           |      |      |     |
| (define(  | off-screen                     |               | X-C                 | x-coord   |             | )           |                       |                            |             |                            |           |      |      |     |
|   |                                | funci         | tion name           | va        | riables     |             |                       |                            |             |                            |           |      |      |     |
|   | (and (< x-coord -              |               |                     | -50)      | 50) (> x-cd |             |                       | ord 690))                  |             |                            | )         |      |      |     |
|   |                                |               |                     |           | what t      | ha function | dogsv                 | ith the                    | sa variabla |                            |           |      |      |     |