Directions: Write a function that returns the area of a circle given its diameter.

Contract and Purpose Statement

Every contract has three parts...

;   circle-area   :   number   →   number
       function name   *domain*   *range*

;   Takes   the   diameter   of   a   circle   and   calculates   the   area   by   multiplying
                            what does the function do?

Examples

Write some examples, then circle and label what changes...

(EXAMPLE(circle-area   10   )   (*   (sqr   (/   10   2))   pi)   )
         function name   *input(s)*   *what the function produces*

(EXAMPLE(circle-area   50   )   (*   (sqr   (/   50   2))   pi)   )
         function name   *input(s)*   *what the function produces*

Definition

Write the definition, given variable names to all your input values...

(define(area   diameter   )
        function name   *variables*

        (*   (sqr   diameter)   pi)   )
                     what the function does with these variables