Check for Mistakes in this Word Problem: circle-area

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 those variables