## 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  $\rightarrow$  number Takes the diameter of a circle and calculates the area by multiplying the square of the radius by pi. Write some examples, then circle and label what changes... (EXAMPLE ( circle-area10 )(\* (sqr (/ 10 2)) pi) (EXAMPLE ( circle-area50 )(\* (sqr (/ 50 2)) pi) Definition Write the definition, given variable names to all your input values... (define ( diameter )(\* (sqr diameter) pi)) area