

Word Problem: distance

Directions: Write a function distance, which takes FOUR inputs:

- *px*: The x-coordinate of the player
- *py*: The y-coordinate of the player
- *cx*: the x-coordinate of another game character
- *cy*: the y-coordinate of another game character

It should return the distance between the two, using the Distance formula. (HINT: look at what you did on the previous page!)

Contract and Purpose Statement

Every contract has three parts...

Figure 1 illustrates the structure of a function signature. It shows three horizontal bars representing the components of a function signature: *function name*, *domain*, and *range*. The *function name* bar is on the left, followed by the *domain* bar, and then the *range* bar. A vertical line separates the *function name* from the *domain*, and another vertical line separates the *domain* from the *range*. Above the *function name* bar is a small 'f' and above the *domain* bar is a small 'x'.

Examples

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

```
(EXAMPLE( _____ )  
         _____  
         _____  
         _____)  
  
_____
```

(EXAMPLE($\frac{1}{2}$))

function name	input(s)
getMonth	date
getDay	date
getYear	date
getHours	date
getMinutes	date
getSeconds	date
getTime	date
setMonth	date, month
setDay	date, day
setYear	date, year
setHours	date, hours
setMinutes	date, minutes
setSeconds	date, seconds
setTime	date, time
toUTCString	date
toGMTString	date
toLocaleString	date
toLocaleDateString	date, options
toLocaleTimeString	date, options
toDateString	date
toTimeString	date
toUTCDate	date
toUTCTime	date
toGMTDate	date
toGMTTime	date
toSource	
toString	
valueOf	
constructor	

what the function produces

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

```
(define( function name variables )
```

what the function does with these variables