s== Directions for contributors: Please delete these directions before writing problem if layout is important. The QRP solve BringMN macro will delete them (and anything between s double equal and double equal s markup tags like those around this section) otherwise.

1 for numerical Game variables copy and paste the following:

##varname,g1\_num,Basecase value##

##varname,g2\_num,Basecase value##

##varname,g3\_num,Basecase value##

For text Game variables copy and paste the following:

##varname,g1\_txt,Basecase value##

##varname,g2\_txt,Basecase value##

##varname,g3\_txt,Basecase value##

Replace the varname and the Bacecase values. You may only use a maximum total of 3 game variables that must be of type g1\_???, g2\_??? And g3\_??? - where ??? is either txt of num. You can change the box length to fit the longest word of the options for that variable, but do not change its format or layout options.

2) Add different higher level qualitative questions at the end of the problem for non-game problems.

3) Delete these directions Open the QRPSolution template. –This bring the variable names into the solution template.

4) solve the problem – see QRPsolve template for directions on this.

5) Run Prep macro in QRPSolve template to prep this document and I/O files for upload

6) Upload required files to QRPproblems web site and provide metadata. A simple example is shown below, and this can be deleted or replaced:

- Note anything included between the t== and ==t will be included with the base case values in the area denoted by u== and ==u in the final version.

==s

t== The disc was made of ##material,g1\_txt,iron##, had a diameter of ##diameter,g2\_num,1.0##meters and a thickness of 10 mm. If the ##material,txt,iron## costs $ ##varname,g3\_num,Basecase value##per pound, determine the

p==a==p volume of the disc in cubic centimeters

p==b==p mass of the disc in kg

p==c==p the material cost (in $) for one of these discs

Note: The Specific Gravity (density of the material/ density of water at 4°C) for some materials are given below

|  |  |
| --- | --- |
| **Material** | **Specific Gravity** |
| Iron | 7.86 |
| Titanium | 4.5 |
| Aluminum | 2.7 |
| HDPE | 0.95 |

==t

s== The base case will go in the base case input tags below (please do not remove them) ==s

v== **Base Case Index = 1**

==v

u==

==u