

Algorithm

Project 3

1. SET choice = yes
2. WHILE choice = "yes"
3. OUTPUT "enter radius of sphere"
4. INPUT radius
5. OUTPUT "Enter the text you want to display on one side of the sign"
6. INPUT text
7. OUTPUT "Select emoji for the other side of the sign. Enter 1 for Glasses and 2 for Wink and Smile."
8. INPUT selection
9. IF (selection=1)
 - a. emojiCost = 500
 - b. emojiDesign = "glasses"
- ELSE IF
 - a. emojiCost = 450
 - b. emojiDesign = "Wink and Smile"
- ELSE
 - a. Output "Selection was invalid, please try again"
- END IF/ELSE
8. surfaceArea = $4\pi r^2$
9. sphereVolume = $(4/3)\pi r^3$
10. COUNT text and store in numberOfCharacters
11. Calculate neonGas by multiplying 3.45 by sphereVolume

12. Calculate plasticPrice by multiplying 2.75 by surfaceArea
13. Calculate charCost by multiplying 4.5 by numberOfCharacters
14. Calculate totalCost by emojiCost + neonGas + plasticPrice + charCost
15. OUTPUT "Your sign with " + text + "will cost " + totalCost
16. OUTPUT "Would you like to create another sign? Enter yes to
continue."
17. INPUT choice
18. ENDWHILE