Write an Algorithm in Pseudocode for the below Exercises

- 1. Tell someone how old they will be in 20 years
- 2. Compute the area of a circle
- 3. If two trains leave 2 different stations 10 miles apart, going in the same direction at the same time, assuming the first train is going faster, when will it catch up to the second train? (in hours)
- 4. Compute the new price for a product that's on sale for 10% off
- 5. Subtract 2 numbers. If the result is positive, say "Positive"; if the result is negative, say "Negative". If the result is 0, say "Zero"
- 6. Compute the number of square feet for carpeting needed for a bedroom, a living room and a family room
- 7. Pick a number between 1 and 10 that you want someone to guess, then keep asking them to guess a number for up to 3 times until they get it. If they guess right in 3 tries, they get a prize, if they didn't, they get nothing.
- 8. Add the prices of an order of fries, a burger and a drink. Calculate the tax and tell the customer their total.
 - a. How would you generalize your algorithm to add up the prices of any number of items and calculate tax and a total (assume that ALL items are taxable)
- 9. Compute how many feet of a wall must be covered in paint if the home owner wants you to paint everything but a circle in the middle of the wall
- 10. Ask a user what day of the week it is. Assuming Sunday is the first day of the week, tell the user what number day of the week they've chosen