# 2 – Variables & Operators.

Jenn is new to bowling but hopes to join the bowling team. For the tryout she played five games with the hopes of making the cutoff average of 185 points to earn a spot on the team. She’s fairly certain she didn’t make the team but wants to find out what her average was and how far off she was from making the team.

Jenn’s Game Scores

Game 1: 190

Game 2: 155

Game 3: 186

Game 4: 145

Game 5: 170

Create a program that sends a popup box with the message: "Your average for the past 5 games is: " with Jenn’s average. The number of games should be a variable in case we want to change it from 5 later.

Create a second popup that tells her how many points her average is away from the required average to improve her score at the next try outs. That number should not have more than one decimal place.

Before you create any coding, remember to “think like a programmer”; break down the problem into steps. Use comments to create your list of steps before you type a line of code. E.g.

//Create score variables.

//Create logic variables.

My answer is on the next page…

ANSWER

//Create score variables

var game1 = 190;

var game2 = 155;

var game3 = 186;

var game4 = 145;

var game5 = 171;

//Create logic variables

var gamesTotal = 0;

var numOfGames = 5;

var gamesAverage = 0;

var targetAverage = 185;

var targetDifference = 0;

//Add game scores

gamesTotal = game1 + game2 + game3 + game4 + game5;

//Get average

gamesAverage = gamesTotal / numOfGames;

//Get margin of difference

targetDifference = targetAverage - gamesAverage;

//Output Messages

alert("Your average for " + numOfGames + " games is " + gamesAverage);

alert("Your average is " + targetDifference.toFixed(1) + " less than the target average. ");

### CORRECT RESULTS

Her total score for five games: 847.

Her average: 169.4

The margin of difference: 15.6