Problem Chosen	2021 MCM/ICM Summary Sheet	Team Control Number
A		2123481

The XXX problem

Summary

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Do not include the name of your school, advisor, or team members on this or any page.

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Keywords: Matlab; Mathematical modelling.

The XXX problem

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February 4, 2021

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Contents

1 Introduction

1.1 What's this all about? What's LaTeX?

LaTeX is a document preparation system which uses the TeX typesetting program. It enables you to produce publication-quality documents with great accuracy and consistency. LaTeX works on any computer and produces industry-standard PDF. It is available both in free (open-source) and commercial implementations. LaTeX can be used for any kind of document, but it is especially suited to those with complex structures, repetitive formatting, or notations like mathematics. Install the software from `www.tug.org/texlive/`.

1.2 Creating and typesetting your document

1.3 Syntax (how to type LaTeX commands — these are the rules)

- the angular velocity of the bat,
- the velocity of the ball, and
- the position of impact along the bat.

center of percussion [Brody 1986],

Theorem 1.1. *LaTeX*

Lemma 1.2. *TeX.*

Proof. The proof of theorem. □

1.4 Other Assumptions

-
-
-
-

2 Analysis of the Problem

(1)

$$a^2 \tag{1}$$

$$\begin{pmatrix} *20ca_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{pmatrix} = \frac{Opposite}{Hypotenuse} \cos^{-1}\theta \arcsin\theta$$

Figure 1: The name of figure

$$p_j = \begin{cases} 0, & \text{if } j \text{ is odd} \\ r!\,(-1)^{j/2}, & \text{if } j \text{ is even} \end{cases}$$

$$\arcsin\theta = \oiint_{\varphi} \lim_{x\to\infty} \frac{n!}{r!\,(n-r)!} \tag{1}$$

3 Calculating and Simplifying the Model

4 The Model Results

5 Validating the Model

6 Conclusions

7 A Summary

8 Evaluate of the Mode

9 Strengths and weaknesses

test
test
test!
test.

9.1 Strengths

- **Applies widely**
  This system can be used for many types[1] of airplanes, and it also solves the interference during the procedure of the boarding airplane,as described above we can get to the optimization boarding time.We also know that all the service is automate.
- **Improve the quality of the airport service**
  Balancing the cost of the cost and the benefit, it will bring in more convenient for airport and passengers.It also saves many human resources for the airline.
-

References

[1] Robert R Bush and Frederick Mosteller. A mathematical model for simple learning. In *Selected Papers of Frederick Mosteller*, pages 221–234. Springer, 2006.

Appendices

Appendix A First appendix

In addition, your report must include a letter to the Chief Financial Officer (CFO) of the Goodgrant Foundation, Mr. Alpha Chiang, that describes the optimal investment strategy, your modeling approach and major results, and a brief discussion of your proposed concept of a return-on-investment (ROI). This letter should be no more than two pages in length.

Dear, Mr. Alpha Chiang

Sincerely yours,

Your friends

Here are simulation programmes we used in our model as follow.

Input matlab source:

```
function [t,seat,aisle]=OI6Sim(n,target,seated)
pab=rand(1,n);
for i=1:n
    if pab(i)<0.4
       aisleTime(i)=0;
    else
        aisleTime(i)=trirnd(3.2,7.1,38.7);
    end
end
```

Appendix B Second appendix

some more text **Input C++ source:**

```
//============================================================================
// Name        : Sudoku.cpp
// Author      : wzlf11
// Version     : a.0
// Copyright   : Your copyright notice
// Description : Sudoku in C++.
//============================================================================

#include <iostream>
#include <cstdlib>
#include <ctime>

using namespace std;

int table[9][9];

int main() {

    for(int i = 0; i < 9; i++){
        table[0][i] = i + 1;
    }

    srand((unsigned int)time(NULL));

    shuffle((int *)&table[0], 9);

    while(!put_line(1))
    {
        shuffle((int *)&table[0], 9);
    }

    for(int x = 0; x < 9; x++){
        for(int y = 0; y < 9; y++){
            cout << table[x][y] << " ";
        }

        cout << endl;
    }

    return 0;
}
```