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to the 1990s, the number of people in the world who are undernourished has increased from 650 million to 800 million. In 1990, 17% of the world population was undernourished, but by 2000, this had risen to 21%. The number of people who are undernourished is projected to rise to 850 million by 2010, and to 950 million by 2020 (FAO 2001).

There are a number of reasons why the number of people who are undernourished has increased. One of the main reasons is that the world population has increased. In 1990, there were 5.3 billion people in the world, but by 2000, this had risen to 6.1 billion. The world population is projected to rise to 6.9 billion by 2010, and to 7.9 billion by 2020 (FAO 2001). Another reason is that the world's food production has not kept pace with the world's population growth. In 1990, the world produced 1.8 billion tonnes of food, but by 2000, this had risen to 2.4 billion tonnes. The world's food production is projected to rise to 3.1 billion tonnes by 2010, and to 3.7 billion tonnes by 2020 (FAO 2001).

There are a number of reasons why the world's food production has not kept pace with the world's population growth. One of the main reasons is that the world's agricultural production has not kept pace with the world's population growth. In 1990, the world produced 1.8 billion tonnes of food, but by 2000, this had risen to 2.4 billion tonnes. The world's agricultural production is projected to rise to 3.1 billion tonnes by 2010, and to 3.7 billion tonnes by 2020 (FAO 2001).

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1. Introduction



2. Methodology

3. Results

4. Discussion

5. Conclusion

6. References

7. Appendix

8. Acknowledgments





1. *Introduction*

2. *Methodology*

3. *Results*

4. *Discussion*

5. *Conclusion*

6. *References*

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8. *Notes*

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10. *Figures*

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the first of the month of
January, 1780, the British
army evacuated Boston and
moved to the northward.



Map of Boston, Massachusetts, showing the city's layout and surrounding areas.

The first part of the history of the city of Boston is a description of the city as it was in the year 1630, when it was first settled by the Puritans. The second part is a description of the city as it was in the year 1700, when it was the largest city in New England. The third part is a description of the city as it was in the year 1775, when it was the seat of the American Revolution. The fourth part is a description of the city as it was in the year 1800, when it was the largest city in the United States. The fifth part is a description of the city as it was in the year 1850, when it was the largest city in the world. The sixth part is a description of the city as it was in the year 1900, when it was the largest city in the world. The seventh part is a description of the city as it was in the year 1950, when it was the largest city in the world. The eighth part is a description of the city as it was in the year 2000, when it was the largest city in the world. The ninth part is a description of the city as it was in the year 2010, when it was the largest city in the world. The tenth part is a description of the city as it was in the year 2020, when it was the largest city in the world.



The first part of the text is a list of names, likely a roster or index, arranged in several columns. The names are written in a small, dense font and include various surnames and first names, some with titles or ranks. The text is somewhat faded and difficult to read in detail, but it appears to be a formal list of individuals.





Abstract: This paper discusses the application of the Laplace transform to solve differential equations. The Laplace transform is a powerful tool for solving linear differential equations with constant coefficients. It converts the differential equation into an algebraic equation in the s-domain, which is easier to solve. The inverse Laplace transform is used to find the solution in the time domain.

The Laplace transform is defined as $F(s) = \int_0^{\infty} f(t)e^{-st} dt$, where $f(t)$ is the function of time and $F(s)$ is the Laplace transform of $f(t)$. The inverse Laplace transform is given by $f(t) = \frac{1}{2\pi i} \int_{\gamma - i\infty}^{\gamma + i\infty} F(s)e^{st} ds$, where γ is a real number greater than the real part of all the poles of $F(s)$.

Consider a second-order linear differential equation with constant coefficients: $y'' + ay' + by = c$. Applying the Laplace transform to both sides, we get $s^2 Y(s) - sy(0) - y'(0) + a(sY(s) - y(0)) + bY(s) = \frac{c}{s}$. Solving for $Y(s)$, we have $Y(s) = \frac{c}{s(s^2 + as + b)} + \frac{sy(0) + y'(0) + ay(0)}{s^2 + as + b}$. The first term can be decomposed into partial fractions, and the second term can be expressed in terms of the roots of the characteristic equation $s^2 + as + b = 0$.

For example, if the characteristic equation has two distinct real roots s_1 and s_2 , then $Y(s) = \frac{A}{s} + \frac{B}{s - s_1} + \frac{C}{s - s_2} + \frac{D}{s - s_1} + \frac{E}{s - s_2}$. The inverse Laplace transform of $Y(s)$ is $y(t) = A + B e^{s_1 t} + C e^{s_2 t} + D t e^{s_1 t} + E t e^{s_2 t}$.

If the characteristic equation has a repeated real root s_1 , then $Y(s) = \frac{A}{s} + \frac{B}{s - s_1} + \frac{C}{(s - s_1)^2} + \frac{D}{s - s_1} + \frac{E}{(s - s_1)^2}$. The inverse Laplace transform is $y(t) = A + B e^{s_1 t} + C t e^{s_1 t} + D t e^{s_1 t} + E t^2 e^{s_1 t}$.

If the characteristic equation has complex conjugate roots $s_1 = \alpha + i\beta$ and $s_2 = \alpha - i\beta$, then $Y(s) = \frac{A}{s} + \frac{B}{s - s_1} + \frac{C}{s - s_2} + \frac{D}{s - s_1} + \frac{E}{s - s_2}$. The inverse Laplace transform is $y(t) = A + B e^{\alpha t} \cos(\beta t) + C e^{\alpha t} \sin(\beta t) + D t e^{\alpha t} \cos(\beta t) + E t e^{\alpha t} \sin(\beta t)$.

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