

SECTION A**QUESTION 1**

A study is done with twelve employees in a company to understand the relationship between the number of rest days given in a year and the productivity of each employee.

The results are shown in the table below:

Rest days given	5	2	9	1	3	12	10	4	4	5	8	6
Productivity of the employee	0,87	0,65	0,9	0,58	0,7	0,91	0,88	0,78	0,72	0,91	0,82	0,62

(a) Calculate the correlation coefficient. (Round off correct to four decimal places.)

(2)

(b) Refer to your correlation coefficient and circle the letter that best describes the relationship. Only one letter must be circled.

- A Fairly strong, negative correlation
- B Very weak, positive correlation
- C Fairly strong, positive correlation
- D Perfect, positive correlation

(1)

(c) If the equation of the least squares regression line is $y = A + Bx$, calculate the values of A and B. Give answers correct to four decimal places.

(2)

(d) Should the regression line in (c) be used to predict the productivity of an employee if thirty rest days were given to the employee in a year? (Explain your answer.)

(2)
[7]

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Table of Contents Question P2 Mathematics Grd10

1. Understanding the eBook Question P2 Mathematics Grd10
 - The Rise of Digital Reading Question P2 Mathematics Grd10
 - Advantages of eBooks Over Traditional Books
2. Identifying Question P2 Mathematics Grd10
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Question P2 Mathematics Grd10
 - User-Friendly Interface
4. Exploring eBook Recommendations from Question P2 Mathematics Grd10
 - Personalized Recommendations
 - Question P2 Mathematics Grd10 User Reviews and Ratings
 - Question P2 Mathematics Grd10 and Bestseller Lists
5. Accessing Question P2 Mathematics Grd10 Free and Paid eBooks

- Question P2 Mathematics Grd10 Public Domain eBooks
- Question P2 Mathematics Grd10 eBook Subscription Services
- Question P2 Mathematics Grd10 Budget-Friendly Options

6. Navigating Question P2 Mathematics Grd10 eBook Formats

- ePUB, PDF, MOBI, and More
- Question P2 Mathematics Grd10 Compatibility with Devices
- Question P2 Mathematics Grd10 Enhanced eBook Features

7. Enhancing Your Reading Experience

- Adjustable Fonts and Text Sizes of Question P2 Mathematics Grd10
- Highlighting and Note-Taking Question P2 Mathematics Grd10
- Interactive Elements Question P2 Mathematics Grd10

8. Staying Engaged with Question P2 Mathematics Grd10

- Joining Online Reading Communities
- Participating in Virtual Book Clubs
- Following Authors and Publishers Question P2 Mathematics Grd10

9. Balancing eBooks and Physical Books Question P2 Mathematics Grd10

- Benefits of a Digital Library
- Creating a Diverse Reading Collection Question P2 Mathematics Grd10

10. Overcoming Reading Challenges

- Dealing with Digital Eye Strain
- Minimizing Distractions
- Managing Screen Time

11. Cultivating a Reading Routine Question P2 Mathematics Grd10

- Setting Reading Goals Question P2 Mathematics Grd10
- Carving Out Dedicated Reading Time

12. Sourcing Reliable Information of Question P2 Mathematics Grd10

- Fact-Checking eBook Content of Question P2 Mathematics Grd10
- Distinguishing Credible Sources

13. Promoting Lifelong Learning

- Utilizing eBooks for Skill Development

- Exploring Educational eBooks
- 14. Embracing eBook Trends
 - Integration of Multimedia Elements
 - Interactive and Gamified eBooks

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