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(2017 8 2018)

Handwritten musical score on ten systems of five-line staves. The notation includes various rhythmic values, stems, and beams. The score is organized into systems, with some systems containing two staves. The right margin contains a vertical list of numbers and symbols corresponding to the staves.

| Staff | Number | Symbol |
|-------|--------|--------|
| 1 | 1 | • |
| 2 | 2 | , |
| • | | |
| 1 | 1 | |
| 2 | 2 | |
| • | | |
| 10 | | 10 |
| 11 | | 11 |
| 12 | | 12 |
| 1 | 1 | 1 |
| 2 | 2 | 22 |
| • | | 2 |
| 2 | | 2 |
| • | | •1 |
| • | | • |
| , | | ,0 |
| , | | ,• |
| , | | ,• |
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| 2 | 2 | 2 |
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| (.) | | 1 |
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| , | | 0 |
| , | | 1 |
| , | | • |
| , | | • |
| 1 | 1 | |
| 2 | 2 | , |
| • | | |
| 10 | | 2 |
| 1 | 1 | 2 |
| 2 | 2 | |
| • | | |
| 11 | | 0 |
| 1 | 1 | 0 |
| 2 | 2 | 1 |
| 12 | | 2 |
| 1 | 1 | 2 |
| 2 | 2 | • |
| 1• | | 1 |
| 1, | | 1 |
| 1 | | 11 |

1

() ()
 (), ()
 () ()
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2

()

1, 2
 () 1, 2
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 ()
 1011

| | () | (%) |
|-----|--------|--------|
| () | 2, 20, | , 0, % |
| | 2, 20, | , 0, % |
| | 2, | , 1% |

1, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
 2,000,000
 12,000,000
 1,000,000
 2.

1000

中國國際海運集裝箱(集團)股份有限公司

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1000

中國國際海運集裝箱(集團)股份有限公司

Ex. 1.

Handwritten musical notation for the first exercise, consisting of a single staff with notes and rests.

t 3

t 1

Ex. 1,

Handwritten musical notation for the second exercise, consisting of a single staff with notes and rests.

Ex. 1

Handwritten musical notation for the third exercise, consisting of a single staff with notes and rests.

Ex. 1

Handwritten musical notation for the fourth exercise, consisting of a single staff with notes and rests.

Ex. 1

Handwritten musical notation for the fifth exercise, consisting of a single staff with notes and rests.

...
 ...
 ...
 ...
 ...

1
 ...

1
 ... 0,000,000
 ...
 ... 2,20,000 ... 2,20,000 ... 2,000
 ... 0% ... 0% ... 1%

20
 ... 2,00,000
 ... 1,1,1,2
 ... 1,0,0,0

...
 ...
 ...

...
 ... 2,2,0,0 1 ... 1,0,0,0
 ... () 1,2,1,1,2
 ... % ... 2%

...
 ... 2,0,1,1
 ... 1,2,1,2,0
 ... 1,1,0
 ... ()
 ... 2.0% %

21

Handwritten text for question 21, consisting of two lines of cursive script.

Handwritten text for question 21, consisting of two lines of cursive script.

22

Handwritten text for question 22, consisting of two lines of cursive script.

2.

Handwritten text for question 2, consisting of two lines of cursive script.

$t_2 \quad \dots \quad t_2 \quad \dots$

2,

Handwritten text for question 2, consisting of two lines of cursive script.

- (1) Handwritten text
- (2) Handwritten text
- (3) Handwritten text
- (4) Handwritten text
- (5) Handwritten text

2

Handwritten text for question 2, consisting of two lines of cursive script.

2

Handwritten text for question 2, consisting of two lines of cursive script.

1. The first step in the process of the scientific method is to ask a question.

2. The second step is to do background research on the topic.

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... (1) ...
(•) 2 ...
(1) 2 ... (2) () ...

... (•) ...
2 % ...

... () ...

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... () ...

(1) ...

(2) ...

1. ...

2. *[Faint, illegible handwritten text]*

(•) *[Faint, illegible handwritten text]*

1. *[Faint, illegible handwritten text]*

2. *[Faint, illegible handwritten text]*

• *[Faint, illegible handwritten text]*

(,) *[Faint, illegible handwritten text]*

t 3

•2 *[Faint, illegible handwritten text]*

•• *[Faint, illegible handwritten text]*

•, *[Faint, illegible handwritten text]*
2 % *[Faint, illegible handwritten text]*

[Faint, illegible handwritten text]

(1) $\int_0^1 x^2 dx = \frac{1}{3} x^3 \Big|_0^1 = \frac{1}{3} (1^3 - 0^3) = \frac{1}{3}$

(2) $\int_0^1 x^3 dx = \frac{1}{4} x^4 \Big|_0^1 = \frac{1}{4} (1^4 - 0^4) = \frac{1}{4}$

Ex 7

(1) $\int_0^1 x^2 dx = \frac{1}{3} x^3 \Big|_0^1 = \frac{1}{3} (1^3 - 0^3) = \frac{1}{3}$

(2) $\int_0^1 x^3 dx = \frac{1}{4} x^4 \Big|_0^1 = \frac{1}{4} (1^4 - 0^4) = \frac{1}{4}$

(3) $\int_0^1 x^4 dx = \frac{1}{5} x^5 \Big|_0^1 = \frac{1}{5} (1^5 - 0^5) = \frac{1}{5}$

(4) $\int_0^1 x^5 dx = \frac{1}{6} x^6 \Big|_0^1 = \frac{1}{6} (1^6 - 0^6) = \frac{1}{6}$

(5) $\int_0^1 x^6 dx = \frac{1}{7} x^7 \Big|_0^1 = \frac{1}{7} (1^7 - 0^7) = \frac{1}{7}$

(6) $\int_0^1 x^7 dx = \frac{1}{8} x^8 \Big|_0^1 = \frac{1}{8} (1^8 - 0^8) = \frac{1}{8}$

$$t_4 \quad \quad \quad t_4 \quad \quad \quad t_4 \quad \quad \quad t_4$$

Ex 8

$\int_0^1 x^2 dx = \frac{1}{3} x^3 \Big|_0^1 = \frac{1}{3} (1^3 - 0^3) = \frac{1}{3}$

$\int_0^1 x^3 dx = \frac{1}{4} x^4 \Big|_0^1 = \frac{1}{4} (1^4 - 0^4) = \frac{1}{4}$

Ex 9

$\int_0^1 x^2 dx = \frac{1}{3} x^3 \Big|_0^1 = \frac{1}{3} (1^3 - 0^3) = \frac{1}{3}$

Ques 1

1. The following are the steps in the process of the formation of a new country. List them in the order in which they occur.

- (1) Declaration of independence
- (2) Adoption of a constitution
- (3) Establishment of a government
- (4) Recognition by other countries
- (5) Declaration of sovereignty
- (6) Establishment of a legal system
- (7) Declaration of a national flag
- (8) Declaration of a national anthem

2. The following are the steps in the process of the formation of a new country. List them in the order in which they occur.

Ques 2

1. The following are the steps in the process of the formation of a new country. List them in the order in which they occur.

2. The following are the steps in the process of the formation of a new country. List them in the order in which they occur.

Ques 3

1. The following are the steps in the process of the formation of a new country. List them in the order in which they occur.

- (1) Declaration of independence
- (2) Adoption of a constitution
- (3) Establishment of a government
- (4) Recognition by other countries
- (5) Declaration of sovereignty
- (6) Establishment of a legal system
- (7) Declaration of a national flag
- (8) Declaration of a national anthem

Ques 1)

1. The following information is available for the year ended 31st December 2018:

Revenue: 1000
Cost of Sales: 600
Gross Profit: 400
Operating Expenses: 200
Operating Profit: 200
Finance Costs: 50
Tax: 20
Profit After Tax: 130

(1) The company has a policy of providing for depreciation on a straight-line basis. The depreciation charge for the year ended 31st December 2018 is \$2.0 million.

(2) The company has a policy of providing for bad debts on a straight-line basis.

(3) The company has a policy of providing for doubtful debts on a straight-line basis.

(4) The company has a policy of providing for inventory on a straight-line basis.

(5) The company has a policy of providing for prepayments on a straight-line basis.

(6) The company has a policy of providing for provisions on a straight-line basis.

Required: Prepare the Statement of Profit or Loss for the year ended 31st December 2018.

Ques 2)

1. The following information is available for the year ended 31st December 2018:

Ques 3)

1. The following information is available for the year ended 31st December 2018:

$\frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2} \cdot 1 = \frac{1}{2}$

$\frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2} \cdot 1 = \frac{1}{2}$

$\frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2} \cdot 1 = \frac{1}{2}$

$\frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2} \cdot 1 = \frac{1}{2}$

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$\frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2} \cdot 1 = \frac{1}{2}$

(1) $\frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2} \cdot 1 = \frac{1}{2}$

(2) $\frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2} \cdot 1 = \frac{1}{2}$

(•) $\frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2} \cdot 1 = \frac{1}{2}$

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1. *[Faint, illegible handwritten text]*

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3. *[Faint, illegible handwritten text]*

4. *[Faint, illegible handwritten text]*

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1. *[Faint, illegible handwritten text]*

2. *[Faint, illegible handwritten text]*

3. *[Faint, illegible handwritten text]*

4. *[Faint, illegible handwritten text]*

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- 1. *[Faint, illegible handwritten text]*
- (1) *[Faint, illegible handwritten text]*
- (2) *[Faint, illegible handwritten text]*
- (3) *[Faint, illegible handwritten text]*
- (4) *[Faint, illegible handwritten text]*
- (5) *[Faint, illegible handwritten text]*
- 1. *[Faint, illegible handwritten text]*

2.

1. $\frac{1}{x^2} = x^{-2}$

(1) $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

(2) $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

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$\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

(1) $\int_{-\infty}^{\infty} \delta(x) dx = 1$ (normalization condition)

(2) $\int_{-\infty}^{\infty} x \delta(x) dx = 0$ (odd function)

(3) $\int_{-\infty}^{\infty} x^n \delta(x) dx = 0$ for $n > 0$ (odd function)

(4) $\int_{-\infty}^{\infty} x^n \delta(x) dx = 0$ for $n < 0$ (odd function)

Example: $\int_{-\infty}^{\infty} x^n \delta(x) dx = 0$ for $n > 0$ (odd function)

$\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$

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- (1) ...
- (2) ...
- (3) ...
- (4) ...

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- (1) ...

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The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data. The second part of the document provides a detailed breakdown of the financial statements, including the balance sheet, income statement, and cash flow statement. Each statement is accompanied by a clear explanation of the figures and the underlying transactions.

The third part of the document focuses on the analysis of the financial data. It identifies key trends and areas of concern, such as declining profit margins and increasing operating expenses. The fourth part of the document provides recommendations for improving the company's financial performance. These recommendations include reducing unnecessary costs, increasing sales, and improving operational efficiency. The fifth part of the document concludes with a summary of the findings and a final statement of the company's financial health.

The sixth part of the document provides a detailed breakdown of the financial statements, including the balance sheet, income statement, and cash flow statement. Each statement is accompanied by a clear explanation of the figures and the underlying transactions. The seventh part of the document focuses on the analysis of the financial data. It identifies key trends and areas of concern, such as declining profit margins and increasing operating expenses. The eighth part of the document provides recommendations for improving the company's financial performance. These recommendations include reducing unnecessary costs, increasing sales, and improving operational efficiency.

Annex 1

This annex provides a detailed breakdown of the financial statements, including the balance sheet, income statement, and cash flow statement. Each statement is accompanied by a clear explanation of the figures and the underlying transactions.

- (1) The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data.
- (2) The second part of the document provides a detailed breakdown of the financial statements, including the balance sheet, income statement, and cash flow statement. Each statement is accompanied by a clear explanation of the figures and the underlying transactions.
- (3) The third part of the document focuses on the analysis of the financial data. It identifies key trends and areas of concern, such as declining profit margins and increasing operating expenses. The fourth part of the document provides recommendations for improving the company's financial performance. These recommendations include reducing unnecessary costs, increasing sales, and improving operational efficiency.

QUESTION 2

1. A company is considering the purchase of a new machine. The machine will cost \$100,000 and will have a useful life of 5 years. The machine will be depreciated straight-line to zero over its useful life. The machine will generate an annual cash flow of \$25,000. The company's cost of capital is 10%.

(1) Calculate the NPV of the machine.

(2) Calculate the IRR of the machine.

(3) Calculate the payback period of the machine.

(4) Calculate the discounted payback period of the machine.

$$t = 2 \quad t = 3 \quad t = 4$$

QUESTION 3

1. A company is considering the purchase of a new machine. The machine will cost \$100,000 and will have a useful life of 5 years. The machine will be depreciated straight-line to zero over its useful life. The machine will generate an annual cash flow of \$25,000. The company's cost of capital is 10%.

(1) Calculate the NPV of the machine.

(2) Calculate the IRR of the machine.

(3) Calculate the payback period of the machine.

(4) Calculate the discounted payback period of the machine.

(5) Calculate the NPV of the machine if the cost of capital is 15%.

(6) Calculate the IRR of the machine if the cost of capital is 15%.

(7) Calculate the payback period of the machine if the cost of capital is 15%.





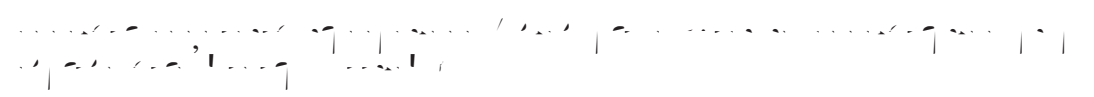

(8) Calculate the discounted payback period of the machine if the cost of capital is 15%.

(9) Calculate the NPV of the machine if the cost of capital is 20%.


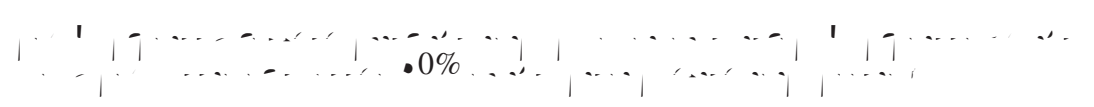



(10) Calculate the IRR of the machine if the cost of capital is 20%.


(11) Calculate the payback period of the machine if the cost of capital is 20%.

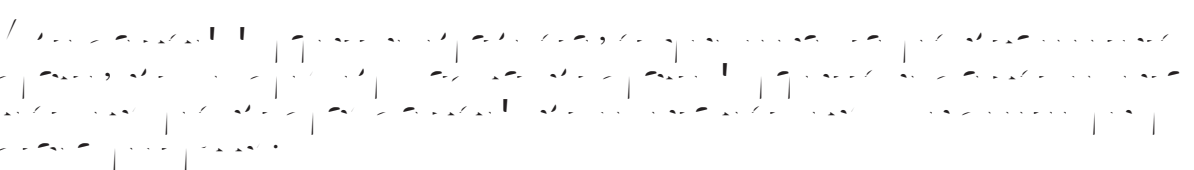
(12) Calculate the discounted payback period of the machine if the cost of capital is 20%.


- (1.) 
- (1.) 
- (1.) 
- (1.) 
- (1.) 
- (1.) 

Andante, 

- (1.) 
- (2.) 
- (.) 
- (.) 
- (.) 

Andante, 





QUESTION 1: The following table shows the results of a survey of 1000 people in a town. The table shows the number of people who use different modes of transport to get to work. Calculate the probability that a randomly chosen person uses a car to get to work.

ANSWER: The total number of people surveyed is 1000. The number of people who use a car to get to work is 350. The probability that a randomly chosen person uses a car to get to work is $\frac{350}{1000} = 0.35$.

QUESTION 2: A bag contains 10 balls. 3 balls are red, 4 balls are blue, and 3 balls are green. Calculate the probability that a randomly chosen ball is red.

ANSWER: The total number of balls is 10. The number of red balls is 3. The probability that a randomly chosen ball is red is $\frac{3}{10} = 0.3$.

QUESTION 3:

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1. The following are the results of the experiment. The results are as follows:

- (1) The results of the experiment are as follows: the results of the experiment are as follows.
- (2) The results of the experiment are as follows: the results of the experiment are as follows.
- (3) The results of the experiment are as follows: the results of the experiment are as follows.
- (4) The results of the experiment are as follows: the results of the experiment are as follows.

t 3

2. The following are the results of the experiment. The results are as follows: 10%

- (1) The results of the experiment are as follows: 10% the results of the experiment are as follows: 10% the results of the experiment are as follows: 10%

The results of the experiment are as follows: 10% the results of the experiment are as follows: 10%

The results of the experiment are as follows: 10% the results of the experiment are as follows: 10%

(2) $\frac{1}{2} \times 10 = 5$ (10 points)

(3) $\frac{1}{2} \times 10 = 5$ (10 points)

(4) $\frac{1}{2} \times 10 = 5$ (10 points)

(5) $\frac{1}{2} \times 10 = 5$ (10 points)

(6) $\frac{1}{2} \times 10 = 5$ (10 points)

(7) $\frac{1}{2} \times 10 = 5$ (10 points)

(8) $\frac{1}{2} \times 10 = 5$ (10 points)

(9) $\frac{1}{2} \times 10 = 5$ (10 points)

(10) $\frac{1}{2} \times 10 = 5$ (10 points)

r^0 $\frac{1}{1+r} = \frac{1}{1.05} = 0.9524$

r^1 $\frac{1}{(1+r)^2} = \frac{1}{(1.05)^2} = 0.9070$

r^2 $\frac{1}{(1+r)^3} = \frac{1}{(1.05)^3} = 0.8638$

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(1)

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1. $\int_{-\infty}^{\infty} \delta(x) dx = 1$

2. $\int_{-\infty}^{\infty} x \delta(x) dx = 0$

3. $\int_{-\infty}^{\infty} x^2 \delta(x) dx = 0$

4. $\int_{-\infty}^{\infty} x^n \delta(x) dx = 0$

5. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

- (1) $\int_{-\infty}^{\infty} \delta(x) dx = 1$
- (2) $\int_{-\infty}^{\infty} x \delta(x) dx = 0$
- (3) $\int_{-\infty}^{\infty} x^2 \delta(x) dx = 0$

Answer

The first part of the question asks for the value of $\frac{1}{x} + \frac{1}{y} + \frac{1}{z}$ given that $x + y + z = 1$ and $xy + yz + zx = 0$. We can use the identity $(x + y + z)^2 = x^2 + y^2 + z^2 + 2(xy + yz + zx)$. Substituting the given values, we get $1^2 = x^2 + y^2 + z^2 + 2(0)$, which simplifies to $x^2 + y^2 + z^2 = 1$. Now, we can use the identity $(\frac{1}{x} + \frac{1}{y} + \frac{1}{z})^2 = \frac{1}{x^2} + \frac{1}{y^2} + \frac{1}{z^2} + 2(\frac{1}{xy} + \frac{1}{yz} + \frac{1}{zx})$. We know $x^2 + y^2 + z^2 = 1$, so $\frac{1}{x^2} + \frac{1}{y^2} + \frac{1}{z^2} = 1$. Also, $xy + yz + zx = 0$, so $\frac{1}{xy} + \frac{1}{yz} + \frac{1}{zx} = 0$. Therefore, $(\frac{1}{x} + \frac{1}{y} + \frac{1}{z})^2 = 1 + 2(0) = 1$. Taking the square root of both sides, we get $\frac{1}{x} + \frac{1}{y} + \frac{1}{z} = \pm 1$.

The second part of the question asks for the value of $\frac{1}{x} + \frac{1}{y} + \frac{1}{z}$ given that $x + y + z = 1$ and $xy + yz + zx = 0$. We can use the identity $(x + y + z)^2 = x^2 + y^2 + z^2 + 2(xy + yz + zx)$. Substituting the given values, we get $1^2 = x^2 + y^2 + z^2 + 2(0)$, which simplifies to $x^2 + y^2 + z^2 = 1$. Now, we can use the identity $(\frac{1}{x} + \frac{1}{y} + \frac{1}{z})^2 = \frac{1}{x^2} + \frac{1}{y^2} + \frac{1}{z^2} + 2(\frac{1}{xy} + \frac{1}{yz} + \frac{1}{zx})$. We know $x^2 + y^2 + z^2 = 1$, so $\frac{1}{x^2} + \frac{1}{y^2} + \frac{1}{z^2} = 1$. Also, $xy + yz + zx = 0$, so $\frac{1}{xy} + \frac{1}{yz} + \frac{1}{zx} = 0$. Therefore, $(\frac{1}{x} + \frac{1}{y} + \frac{1}{z})^2 = 1 + 2(0) = 1$. Taking the square root of both sides, we get $\frac{1}{x} + \frac{1}{y} + \frac{1}{z} = \pm 1$.

Answer

Handwritten text, likely bleed-through from the reverse side of the page.

100 Handwritten text, likely bleed-through from the reverse side of the page.

101 Handwritten text, likely bleed-through from the reverse side of the page.

102 Handwritten text, likely bleed-through from the reverse side of the page.

10• Handwritten text, likely bleed-through from the reverse side of the page.

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10 $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

10 $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

10 $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

10 $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

10 $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

(1) $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

(2) $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

(3) $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

(4) $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

(5) $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

(6) $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

(7) $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

(8) $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

(9) $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

110

Handwritten musical notation for exercise 110, consisting of a single staff with notes and rests.

111

Handwritten musical notation for exercise 111, consisting of a single staff with notes and rests.

t 6 t t t t

112

Handwritten musical notation for exercise 112, consisting of a single staff with notes and rests.

Handwritten musical notation for exercise 112, consisting of a single staff with notes and rests.

Handwritten musical notation for exercise 112, consisting of a single staff with notes and rests.

113

Handwritten musical notation for exercise 113, consisting of a single staff with notes and rests.

(1) Handwritten musical notation for exercise 113, consisting of a single staff with notes and rests.

(2) Handwritten musical notation for exercise 113, consisting of a single staff with notes and rests.

(•) Handwritten musical notation for exercise 113, consisting of a single staff with notes and rests.

() Handwritten musical notation for exercise 113, consisting of a single staff with notes and rests.

() Handwritten musical notation for exercise 113, consisting of a single staff with notes and rests.

() Handwritten musical notation for exercise 113, consisting of a single staff with notes and rests.

11,

Handwritten text, possibly a title or introductory sentence.

- (1) Handwritten text
- (2) Handwritten text
- (3) Handwritten text
- (4) Handwritten text
- (5) Handwritten text
- (6) Handwritten text
- (7) Handwritten text
- (8) Handwritten text
- (9) Handwritten text

11

Handwritten text, possibly a paragraph or a list item.

Handwritten text, possibly a paragraph or a list item.

Handwritten text, possibly a paragraph or a list item.

11

Handwritten musical notation on a staff, including a treble clef, a key signature of one flat, and a series of notes and rests.

11

Handwritten musical notation on a staff, including a treble clef, a key signature of one flat, and a series of notes and rests.

- (1) Handwritten musical notation on a staff.
- (2) Handwritten musical notation on a staff.
- (3) Handwritten musical notation on a staff.
- (4) Handwritten musical notation on a staff.
- (5) Handwritten musical notation on a staff.
- (6) Handwritten musical notation on a staff.

Handwritten musical notation on a staff, including a treble clef, a key signature of one flat, and a series of notes and rests.

Handwritten musical notation on a staff, including a treble clef, a key signature of one flat, and a series of notes and rests.

11

Handwritten musical notation on a staff, including a treble clef, a key signature of one flat, and a series of notes and rests.

11

Handwritten musical notation on a staff, including a treble clef, a key signature of one flat, and a series of notes and rests.

120

Handwritten musical notation on a staff, including a treble clef, a key signature of one flat, and a series of notes and rests.

121

Handwritten text for problem 121, consisting of several lines of mathematical reasoning.

122

Handwritten text for problem 122, consisting of several lines of mathematical reasoning.

123

Handwritten text for problem 123, consisting of several lines of mathematical reasoning.

124

Handwritten text for problem 124, consisting of several lines of mathematical reasoning.

(1)

Handwritten text for sub-problem (1).

(2)

Handwritten text for sub-problem (2).

(3)

Handwritten text for sub-problem (3), including a reference to "10" in the middle of the line.

Handwritten text block, possibly a continuation of a previous problem or a separate one.

Handwritten text line.

Handwritten text line.

125

Handwritten text for problem 125, consisting of several lines of mathematical reasoning.

Handwritten text block, possibly a continuation of a previous problem or a separate one.

Handwritten text block, possibly a continuation of a previous problem or a separate one.

12 $\frac{1}{2} \int_0^1 (x^2 + 2x + 1) dx = \frac{1}{2} \left[\frac{x^3}{3} + x^2 + x \right]_0^1 = \frac{1}{2} \left(\frac{1}{3} + 1 + 1 \right) = \frac{1}{2} \left(\frac{7}{3} \right) = \frac{7}{6}$

12 $\int_0^1 (x^2 + 2x + 1) dx = \left[\frac{x^3}{3} + x^2 + x \right]_0^1 = \frac{1}{3} + 1 + 1 = \frac{7}{3}$

12 $\int_0^1 (x^2 + 2x + 1) dx = \left[\frac{x^3}{3} + x^2 + x \right]_0^1 = \frac{1}{3} + 1 + 1 = \frac{7}{3}$

1. $\frac{1}{x^2} = x^{-2}$. Then $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$.
 $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$.

1. $\frac{d}{dx} x^3 = 3x^2$.
 $\frac{d}{dx} x^3 = 3x^2$.

1. $\frac{d}{dx} x^4 = 4x^3$.
 $\frac{d}{dx} x^4 = 4x^3$.

1. $\frac{d}{dx} x^5 = 5x^4$.
 $\frac{d}{dx} x^5 = 5x^4$.

1. $\frac{d}{dx} x^6 = 6x^5$.
 $\frac{d}{dx} x^6 = 6x^5$.

1. $\frac{d}{dx} x^7 = 7x^6$.
 $\frac{d}{dx} x^7 = 7x^6$.

$t = 7$ t

1. $\frac{d}{dx} x^8 = 8x^7$.
 $\frac{d}{dx} x^8 = 8x^7$.

Ex 1, 1

... ..

Ex 1, 2

... ..

(1)

(2)

(•)

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()

()

()

()

(10)

(11)

(12)

Quest 1, •

... (2) ... (11) ... (12) ... 1, 2.

... Δ ...

(1) ... $2\sqrt{}$... $2\sqrt{}$

(2) ... $2\sqrt{}$... Δ

(•) ... Δ

Quest 1, •

... Quest 1, •

Quest 1,

... 20 ...

... Δ ...

... (...) ...

Quest 1,

... Δ ...

... Δ ...

1. $\int_0^1 x^2 dx = \frac{1}{3}$

(10) $\int_0^1 \frac{1}{x^2} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{x^2} dx = \lim_{\epsilon \rightarrow 0^+} \left[-\frac{1}{x} \right]_{\epsilon}^1 = \lim_{\epsilon \rightarrow 0^+} \left(-1 + \frac{1}{\epsilon} \right) = \infty$

(11) $\int_0^1 \frac{1}{\sqrt{x}} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{\sqrt{x}} dx = \lim_{\epsilon \rightarrow 0^+} \left[2\sqrt{x} \right]_{\epsilon}^1 = \lim_{\epsilon \rightarrow 0^+} (2 - 2\sqrt{\epsilon}) = 2$

(12) $\int_0^1 \frac{1}{x} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{x} dx = \lim_{\epsilon \rightarrow 0^+} \left[\ln x \right]_{\epsilon}^1 = \lim_{\epsilon \rightarrow 0^+} (0 - \ln \epsilon) = \infty$

$\int_0^1 \frac{1}{\sqrt{x}} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{\sqrt{x}} dx = \lim_{\epsilon \rightarrow 0^+} \left[2\sqrt{x} \right]_{\epsilon}^1 = \lim_{\epsilon \rightarrow 0^+} (2 - 2\sqrt{\epsilon}) = 2$

1. $\int_0^1 \frac{1}{x} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{x} dx = \lim_{\epsilon \rightarrow 0^+} \left[\ln x \right]_{\epsilon}^1 = \lim_{\epsilon \rightarrow 0^+} (0 - \ln \epsilon) = \infty$

1.0 $\int_0^1 \frac{1}{\sqrt{x}} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{\sqrt{x}} dx = \lim_{\epsilon \rightarrow 0^+} \left[2\sqrt{x} \right]_{\epsilon}^1 = \lim_{\epsilon \rightarrow 0^+} (2 - 2\sqrt{\epsilon}) = 2$

$\int_0^1 \frac{1}{x} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{x} dx = \lim_{\epsilon \rightarrow 0^+} \left[\ln x \right]_{\epsilon}^1 = \lim_{\epsilon \rightarrow 0^+} (0 - \ln \epsilon) = \infty$

1.1 $\int_0^1 \frac{1}{x^2} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{x^2} dx = \lim_{\epsilon \rightarrow 0^+} \left[-\frac{1}{x} \right]_{\epsilon}^1 = \lim_{\epsilon \rightarrow 0^+} \left(-1 + \frac{1}{\epsilon} \right) = \infty$

1.2 $\int_0^1 \frac{1}{\sqrt{x}} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{\sqrt{x}} dx = \lim_{\epsilon \rightarrow 0^+} \left[2\sqrt{x} \right]_{\epsilon}^1 = \lim_{\epsilon \rightarrow 0^+} (2 - 2\sqrt{\epsilon}) = 2$

1. $\int_0^1 \frac{1}{x} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{x} dx = \lim_{\epsilon \rightarrow 0^+} \left[\ln x \right]_{\epsilon}^1 = \lim_{\epsilon \rightarrow 0^+} (0 - \ln \epsilon) = \infty$

(1) $\int_0^1 \frac{1}{x^2} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{x^2} dx = \lim_{\epsilon \rightarrow 0^+} \left[-\frac{1}{x} \right]_{\epsilon}^1 = \lim_{\epsilon \rightarrow 0^+} \left(-1 + \frac{1}{\epsilon} \right) = \infty$

(2) $\int_0^1 \frac{1}{\sqrt{x}} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{\sqrt{x}} dx = \lim_{\epsilon \rightarrow 0^+} \left[2\sqrt{x} \right]_{\epsilon}^1 = \lim_{\epsilon \rightarrow 0^+} (2 - 2\sqrt{\epsilon}) = 2$

(c) $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{1}{2} m v \frac{dv}{dt} = \frac{1}{2} m v a$

1 $\frac{1}{2} m v^2 = \frac{1}{2} m (v_0^2 + 2 a x) = \frac{1}{2} m v_0^2 + m a x$

1 $\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + m a x$ (2)

1 $\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + m a x$

$\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + m a x$

1 $\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + m a x$ (1)

1 $\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + m a x$

1 0 $\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + m a x$

2

1 1 $\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + m a x$

1 2 $\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + m a x$ (5)

1 • (1) $\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + m a x$

(2) $\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + m a x$

- (•) $\int_{-\infty}^{\infty} \delta(x) dx = 1$
- () $\int_{-\infty}^{\infty} \delta(x) dx = 2$
- () $\int_{-\infty}^{\infty} \delta(x) dx = 0$
- () $\int_{-\infty}^{\infty} \delta(x) dx = \infty$
- () $\int_{-\infty}^{\infty} \delta(x) dx = -1$
- () $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{2}$
- () $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{2}}$
- () $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{e}}$
- (10) $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{2}}$
- (11) $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{e}}$
- (12) $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{2}}$
- (1•) $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{2}}$
- (1,) $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{2}}$
- (1) $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{2}}$
- (1) $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{2}}$
- (1) $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{2}}$
- (1) $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{2}}$
- (1) $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{2}}$

(1), () (12) $\int_{-\infty}^{\infty} \delta(x) dx = \frac{1}{\sqrt{2}}$

1, ...

1 ...

1 ...

1 ... (12) ... 0%

1, ...

1, ... %

▲ ...

...

1.0 下列各题中，只有一个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)

- 1.1 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)
- (1) 下列各题中，只有一个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)
 - (2) 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)
 - (•) 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)
 - (,) 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)
 - () 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)
 - () 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)
 - () 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)

1.2 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)

1.3 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)

- 1.4 (10) 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)
- (1) 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)
 - (2) 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)
 - (•) 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)
 - (,) 下列各题中，有一个或多个选项是正确的，请将正确选项的字母填在题后的括号内。(每题 2 分)

()

()

1. ()

1. ()

(1)

(2)

(3)

(4)

1. ()

(1)

1. ()

1. ()

1.0 ()

... ..

171 (1)

172 (10)

173

- (1)
- (2)
- (3)
- (4)
- (5)

174

t 3 - - t - t ()

175

... ..

176

1/1

Handwritten text for the first question, likely a definition or explanation.

1/1

Handwritten text for the second question.

(1) Handwritten text for the first sub-question.

(2) Handwritten text for the second sub-question.

(•) Handwritten text for the third sub-question.

(,) Handwritten text for the fourth sub-question.

() Handwritten text for the fifth sub-question.

() Handwritten text for the sixth sub-question.

1/1

Handwritten text for the third question.

(1) Handwritten text for the first sub-question.

(2) Handwritten text for the second sub-question.

(•) Handwritten text for the third sub-question.

(,) Handwritten text for the fourth sub-question.

() Handwritten text for the fifth sub-question.

() Handwritten text for the sixth sub-question.

() Handwritten text for the seventh sub-question.

- (e) ...
- (f) ... %
- (g) ...
- (h) ...
- (i) ...
- (j) ...

1. ...

1. ...

1. ...

- (1) ... \$5,000,000 %

...

- (2) ...
- (•) ...
- (,) ...
- () ...
- () ...

... (.) ...

...

1.

...

200

...

(1) ... ()

(2) ...

(•) $\int_{-\infty}^{\infty} \delta(x) dx = 1$ and $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

(,) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ and $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

() $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ and $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

() $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ and $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

201 (1) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

202 $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

20• $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

20, $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

$\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

20

1%

Handwritten musical notation on a staff, including notes, rests, and dynamic markings.

t 4 t t

20

Handwritten musical notation on a staff.

20

Handwritten musical notation on a staff.

20

Handwritten musical notation on a staff.

- (1)
- (2)
- (•)
- (,)
- ()

20

Handwritten musical notation on a staff.

- (1)
- (2)

(6) $\frac{1}{2} \int_0^1 x^2 dx = \frac{1}{2} \left[\frac{x^3}{3} \right]_0^1 = \frac{1}{2} \cdot \frac{1}{3} = \frac{1}{6}$

(7) $\int_0^1 x^2 dx = \left[\frac{x^3}{3} \right]_0^1 = \frac{1}{3}$

(8) $\int_0^1 x^2 dx = \left[\frac{x^3}{3} \right]_0^1 = \frac{1}{3}$

(9) $\int_0^1 x^2 dx = \left[\frac{x^3}{3} \right]_0^1 = \frac{1}{3}$

(10) $\int_0^1 x^2 dx = \left[\frac{x^3}{3} \right]_0^1 = \frac{1}{3}$

(11) $\int_0^1 x^2 dx = \left[\frac{x^3}{3} \right]_0^1 = \frac{1}{3}$

(12) $\int_0^1 x^2 dx = \left[\frac{x^3}{3} \right]_0^1 = \frac{1}{3}$

(13) $\int_0^1 x^2 dx = \left[\frac{x^3}{3} \right]_0^1 = \frac{1}{3}$

$\int_0^1 x^2 dx = \left[\frac{x^3}{3} \right]_0^1 = \frac{1}{3}$

21

(•) *[Faint, illegible text]*

[Faint, illegible text]

[Faint, illegible text]

21

[Faint, illegible text]

[Faint, illegible text]

t 5 tt t t

21

[Faint, illegible text]

21

[Faint, illegible text]

220

Handwritten musical notation on a staff.

(1)

Handwritten musical notation on a staff.

(2)

Handwritten musical notation on a staff.

(•)

Handwritten musical notation on a staff.

221

Handwritten musical notation on a staff.

(1)

Handwritten musical notation on a staff.

(2)

Handwritten musical notation on a staff.

(•)

Handwritten musical notation on a staff.

(,)

Handwritten musical notation on a staff.

()

Handwritten musical notation on a staff.

(.)

Handwritten musical notation on a staff.

222

Handwritten musical notation on a staff.

22.

Handwritten musical notation on a staff.

t 7 t t t

22,

Handwritten musical notation on a staff.

Handwritten musical notation on a staff.

22

Handwritten musical notation on a staff.

... 1 • ... 1, () • () ...

22

... 22

22

... 22

22

... 22

(1) ...

(2) ...

(•) ...

() ...

() ...

() ...

() ...

() ...

() ...

(10) ...

(11) ...

(12) ...

22

... 22

2.0

2.1

2.2

2.3

(1)

(2)

(3)

(4)

2.4

2.5

t 8 tt

t 1

2.6

2.7

2.8

2. $\int_0^1 x^2 dx = \frac{x^3}{3} \Big|_0^1 = \frac{1}{3} - 0 = \frac{1}{3}$

2,0 $\int_0^1 x^2 dx = \frac{x^3}{3} \Big|_0^1 = \frac{1}{3} - 0 = \frac{1}{3}$

2,1 $\int_0^1 x^2 dx = \frac{x^3}{3} \Big|_0^1 = \frac{1}{3} - 0 = \frac{1}{3}$

2,2 $\int_0^1 x^2 dx = \frac{x^3}{3} \Big|_0^1 = \frac{1}{3} - 0 = \frac{1}{3}$

2, • $\int_0^1 x^2 dx = \frac{x^3}{3} \Big|_0^1 = \frac{1}{3} - 0 = \frac{1}{3}$

2, , $\int_0^1 x^2 dx = \frac{x^3}{3} \Big|_0^1 = \frac{1}{3} - 0 = \frac{1}{3}$

2, $\int_0^1 x^2 dx = \frac{x^3}{3} \Big|_0^1 = \frac{1}{3} - 0 = \frac{1}{3}$

2, - $\int_0^1 x^2 dx = \frac{x^3}{3} \Big|_0^1 = \frac{1}{3} - 0 = \frac{1}{3}$

t 2

2, $\int_0^1 x^2 dx = \frac{x^3}{3} \Big|_0^1 = \frac{1}{3} - 0 = \frac{1}{3}$

$\int_0^1 x^2 dx = \frac{x^3}{3} \Big|_0^1 = \frac{1}{3} - 0 = \frac{1}{3}$

2,1

(2) ...

2,2

...

(1) ...

(2) ...

(3) ...

(4) ...

(5) ...

(6) ...

(7) ...

(8) ... 1 2 ...

(9) ...

(10) ...

2 0

() ... 10 ...

2 1

...

2.2. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ (normalization condition)

$\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ (sifting property)

2.3. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ (normalization condition)

2.4. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ (normalization condition)

(1) $\int_{-\infty}^{\infty} \delta(x) dx = 1$

(2) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

(3) $\int_{-\infty}^{\infty} \delta(x) dx = 1$

$$\int_{-\infty}^{\infty} \delta(x) dx = 1$$

2.5. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ (normalization condition)

2.6. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ (normalization condition)

2.7. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ (normalization condition)

$$\int_{-\infty}^{\infty} \delta(x) dx = 1$$

2.8. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ (normalization condition)

2.9. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ (normalization condition)

(1) $\int_{-\infty}^{\infty} \delta(x) dx = 1$

(2) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

(•) $\int_{-\infty}^{\infty} \delta(x) dx = 1$ (normalization condition)

(•) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ (sifting property)

2.0

$\int_{-\infty}^{\infty} \delta(x) dx = 1$ (normalization condition)

2.1

$\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ (sifting property)

(1) $\int_{-\infty}^{\infty} \delta(x) dx = 1$

(2) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

(•) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ (sifting property)

(•) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ (sifting property)

(•) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ (sifting property)

(•) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ (sifting property)

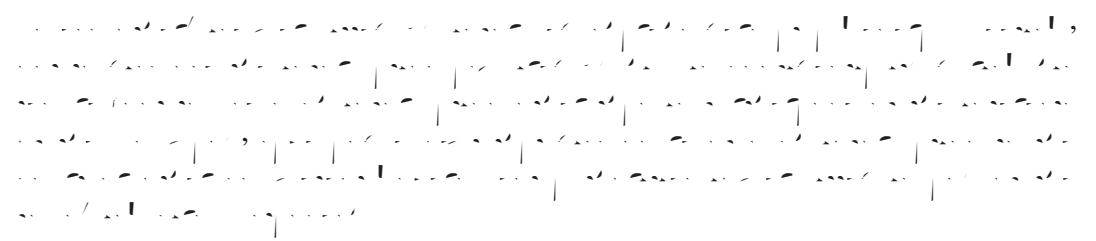
(•) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ (sifting property)

(•) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ (sifting property)


(•) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ (sifting property)

(10) $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ (sifting property)

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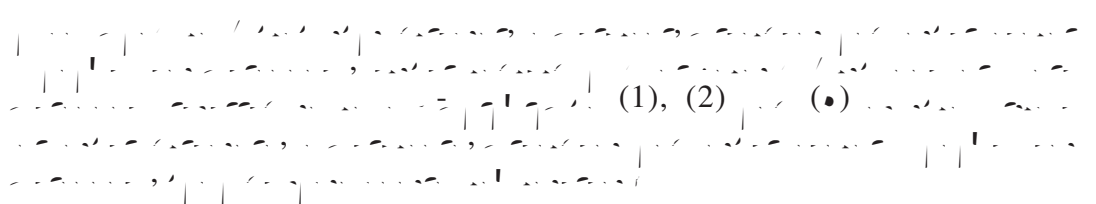
2 2



(1) 

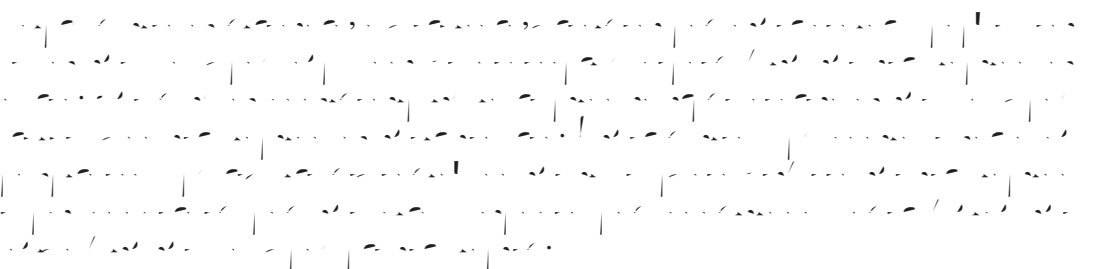
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2, $\int_{-\infty}^{\infty} \delta(x) dx = 1$ 1. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 2. $\int_{-\infty}^{\infty} \delta(x) dx = 1$

2 / $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 1. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ 2. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 3. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ 4. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

$\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 1. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ 2. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 3. $\int_{-\infty}^{\infty} \delta(x) dx = 1$

$\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 1. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ 2. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 3. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ 4. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

$\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 1. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ 2. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

2 / $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 1. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ 2. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 3. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ 4. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

2 $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 1. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ 2. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

2 / $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 1. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ 2. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$ 3. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ 4. $\int_{-\infty}^{\infty} \delta(x) f(x) dx = f(0)$

Handwritten musical notation on a staff.

(1) Handwritten musical notation on a staff.

(2) Handwritten musical notation on a staff.

(•) Handwritten musical notation on a staff.

2, Handwritten musical notation on a staff.

2 0
2 Handwritten musical notation on a staff.

(1) Handwritten musical notation on a staff.

(2) Handwritten musical notation on a staff.

2 1 Handwritten musical notation on a staff.

2 2

2 •

Handwritten text, likely a list or notes, starting with a bullet point.

(1) Handwritten text, possibly a numbered item or sub-point.

(2) Handwritten text, possibly a numbered item or sub-point.

(•) Handwritten text, possibly a bullet point or sub-point.

(,) Handwritten text, possibly a sub-point or note.

() Handwritten text, possibly a sub-point or note.

2 ,

Handwritten text, likely a list or notes, starting with a comma.

(1) Handwritten text, possibly a numbered item or sub-point.

(2) Handwritten text, possibly a numbered item or sub-point.

(•) Handwritten text, possibly a bullet point or sub-point.

() Handwritten text, possibly a sub-point or note.

Handwritten text, possibly a list or notes, starting with a vertical line on the left.

(1) Handwritten text starting with a vertical line on the left.

(2) Handwritten text starting with a vertical line on the left, containing a circled number 2.

Handwritten text starting with a vertical line on the left.

t 10 t t , t t t t
t 1 t t

Handwritten text starting with a vertical line on the left.

Handwritten text starting with a vertical line on the left, containing a circled number 2.

Handwritten text starting with a vertical line on the left.

Handwritten text starting with a vertical line on the left.

... (text) ...

2,1

... (text) ...

2,

... (text) ...

20

... (text) ...

21

2,0

... (text) ...

2,1

... (text) ...

0

120

2,2

... (text) ...

2,0

... (text) ...

10%

0%

... (text) ...

... (text) ...

... ..

... ..

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... - 2₁,

... .. 2

... - 2₁

... ..

... .. 2 %

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(1)

(2)

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... .. 0%

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Handwritten text at the top of the page, possibly a title or introductory paragraph.

Second line of handwritten text.

2

Third line of handwritten text.

(1) Handwritten text with a percentage symbol, possibly indicating a calculation or result.

(2) Handwritten text with a percentage symbol.

(•) Handwritten text with a percentage symbol.

Fourth line of handwritten text.

Large block of handwritten text, possibly a detailed explanation or calculation.

Final block of handwritten text at the bottom of the page.

the ... of ...

the ... of ...

the ... of ...

(1) the ... of ...

(2) the ... of ...

$$t^2 - t - t$$

$2r$ the ... of ...

20 the ... of ...

$$t^3 - t - t$$

21 the ... of ...

the ... of ...

2.2. $\frac{1}{x^2} = x^{-2}$. Derivatives: $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$.
Derivatives: $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$.

2. • Derivatives: $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$.
- (1) $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$. Derivatives: $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$.
 - (2) $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$. Derivatives: $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$.
 - (3) $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$. Derivatives: $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$.

2. Derivatives: $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$.

2. Derivatives: $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$.

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2. Derivatives: $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$.

2. Derivatives: $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$.

(1) $\frac{1}{x^2} = x^{-2}$ $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

(2) $\frac{1}{x^3} = x^{-3}$ $\frac{d}{dx} x^{-3} = -3x^{-4} = -\frac{3}{x^4}$

(i) $\frac{1}{x^4} = x^{-4}$ $\frac{d}{dx} x^{-4} = -4x^{-5} = -\frac{4}{x^5}$

(ii) $\frac{1}{x^5} = x^{-5}$ $\frac{d}{dx} x^{-5} = -5x^{-6} = -\frac{5}{x^6}$

(*) $\frac{1}{x^6} = x^{-6}$ $\frac{d}{dx} x^{-6} = -6x^{-7} = -\frac{6}{x^7}$

(*) $\frac{1}{x^7} = x^{-7}$ $\frac{d}{dx} x^{-7} = -7x^{-8} = -\frac{7}{x^8}$

(i) $\frac{1}{x^8} = x^{-8}$ $\frac{d}{dx} x^{-8} = -8x^{-9} = -\frac{8}{x^9}$

(ii) $\frac{1}{x^9} = x^{-9}$ $\frac{d}{dx} x^{-9} = -9x^{-10} = -\frac{9}{x^{10}}$

(iii) $\frac{1}{x^{10}} = x^{-10}$ $\frac{d}{dx} x^{-10} = -10x^{-11} = -\frac{10}{x^{11}}$

$\frac{1}{x^{11}} = x^{-11}$ $\frac{d}{dx} x^{-11} = -11x^{-12} = -\frac{11}{x^{12}}$

2.

$\frac{1}{x^2} = x^{-2}$ $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

$\frac{1}{x^3} = x^{-3}$ $\frac{d}{dx} x^{-3} = -3x^{-4} = -\frac{3}{x^4}$

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... (faint handwritten text) ...
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... (faint handwritten text) ...

$$\frac{t}{t} = 12, \dots, \frac{t}{t}, \frac{t}{t}$$

$$t = 1, \dots, t, t, t, t$$

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(1) $\frac{1}{x^2} = x^{-2}$, $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

(2) $\frac{1}{x^3} = x^{-3}$, $\frac{d}{dx} x^{-3} = -3x^{-4} = -\frac{3}{x^4}$

(3) $\frac{1}{x^4} = x^{-4}$, $\frac{d}{dx} x^{-4} = -4x^{-5} = -\frac{4}{x^5}$

(4) $\frac{1}{x^5} = x^{-5}$, $\frac{d}{dx} x^{-5} = -5x^{-6} = -\frac{5}{x^6}$

•21

(1) $\frac{1}{x^2} = x^{-2}$, $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

(2) $\frac{1}{x^3} = x^{-3}$, $\frac{d}{dx} x^{-3} = -3x^{-4} = -\frac{3}{x^4}$

(3) $\frac{1}{x^4} = x^{-4}$, $\frac{d}{dx} x^{-4} = -4x^{-5} = -\frac{4}{x^5}$

(4) $\frac{1}{x^5} = x^{-5}$, $\frac{d}{dx} x^{-5} = -5x^{-6} = -\frac{5}{x^6}$

(5) $\frac{1}{x^6} = x^{-6}$, $\frac{d}{dx} x^{-6} = -6x^{-7} = -\frac{6}{x^7}$

(6) $\frac{1}{x^7} = x^{-7}$, $\frac{d}{dx} x^{-7} = -7x^{-8} = -\frac{7}{x^8}$

•22

(1) $\frac{1}{x^2} = x^{-2}$, $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

(2) $\frac{1}{x^3} = x^{-3}$, $\frac{d}{dx} x^{-3} = -3x^{-4} = -\frac{3}{x^4}$

(3) $\frac{1}{x^4} = x^{-4}$, $\frac{d}{dx} x^{-4} = -4x^{-5} = -\frac{4}{x^5}$

(4) $\frac{1}{x^5} = x^{-5}$, $\frac{d}{dx} x^{-5} = -5x^{-6} = -\frac{5}{x^6}$

(5) $\frac{1}{x^6} = x^{-6}$, $\frac{d}{dx} x^{-6} = -6x^{-7} = -\frac{6}{x^7}$

(6) $\frac{1}{x^7} = x^{-7}$, $\frac{d}{dx} x^{-7} = -7x^{-8} = -\frac{7}{x^8}$

(7) $\frac{1}{x^8} = x^{-8}$, $\frac{d}{dx} x^{-8} = -8x^{-9} = -\frac{8}{x^9}$

(8) $\frac{1}{x^9} = x^{-9}$, $\frac{d}{dx} x^{-9} = -9x^{-10} = -\frac{9}{x^{10}}$

•2•

10

Handwritten musical notation on a five-line staff, including notes, rests, and bar lines.

Handwritten musical notation on a five-line staff, including notes, rests, and bar lines.

Handwritten musical notation on a five-line staff, including notes, rests, and bar lines.

•2,

Handwritten musical notation on a five-line staff, including notes, rests, and bar lines.

Handwritten musical notation on a five-line staff, including notes, rests, and bar lines.

Handwritten musical notation on a five-line staff, including notes, rests, and bar lines.

•2

Handwritten musical notation on a five-line staff, including notes, rests, and bar lines.

Handwritten musical notation on a five-line staff, including notes, rests, and bar lines.

•2

Handwritten text, likely a paragraph or list item.

Handwritten text, likely a paragraph or list item.

•2

Handwritten text, likely a paragraph or list item.

Handwritten text, likely a paragraph or list item.

Handwritten text, likely a paragraph or list item.

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Handwritten text, likely a paragraph or list item.

t 13 t t t t

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Handwritten text, likely a paragraph or list item.

(1) Handwritten text, likely a list item.

(2) Handwritten text, likely a list item.

(3) Handwritten text, likely a list item.

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Handwritten text, likely a paragraph or list item.

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(1)

(2)

(•) $\frac{1}{t} \int_{t-1}^t \frac{1}{x} dx = \frac{1}{t} \ln x \Big|_{t-1}^t = \frac{1}{t} (\ln t - \ln(t-1))$ (1)

(,) $\frac{1}{t} \int_{t-1}^t \frac{1}{x} dx = \frac{1}{t} \ln x \Big|_{t-1}^t = \frac{1}{t} (\ln t - \ln(t-1))$

$$t - 15 \quad \dots \quad t$$

••

(1) $\frac{1}{t} \int_{t-1}^t \frac{1}{x} dx = \frac{1}{t} \ln x \Big|_{t-1}^t = \frac{1}{t} (\ln t - \ln(t-1))$ 0%

(2) $\frac{1}{t} \int_{t-1}^t \frac{1}{x} dx = \frac{1}{t} \ln x \Big|_{t-1}^t = \frac{1}{t} (\ln t - \ln(t-1))$

(•) $\frac{1}{t} \int_{t-1}^t \frac{1}{x} dx = \frac{1}{t} \ln x \Big|_{t-1}^t = \frac{1}{t} (\ln t - \ln(t-1))$

(,) $\frac{1}{t} \int_{t-1}^t \frac{1}{x} dx = \frac{1}{t} \ln x \Big|_{t-1}^t = \frac{1}{t} (\ln t - \ln(t-1))$

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$\frac{1}{t} \int_{t-1}^t \frac{1}{x} dx = \frac{1}{t} \ln x \Big|_{t-1}^t = \frac{1}{t} (\ln t - \ln(t-1))$

••

$\frac{1}{t} \int_{t-1}^t \frac{1}{x} dx = \frac{1}{t} \ln x \Big|_{t-1}^t = \frac{1}{t} (\ln t - \ln(t-1))$

••

$\frac{1}{t} \int_{t-1}^t \frac{1}{x} dx = \frac{1}{t} \ln x \Big|_{t-1}^t = \frac{1}{t} (\ln t - \ln(t-1))$

••

$\frac{1}{t} \int_{t-1}^t \frac{1}{x} dx = \frac{1}{t} \ln x \Big|_{t-1}^t = \frac{1}{t} (\ln t - \ln(t-1))$