

電磁調理器の物理学 - 解答用紙

C.1. 誘導コイルの特性評価 (4.5 pts)

1.1 (0.4 pt)

$$R_c =$$

1.2 (1.2 pt)

[illegible]

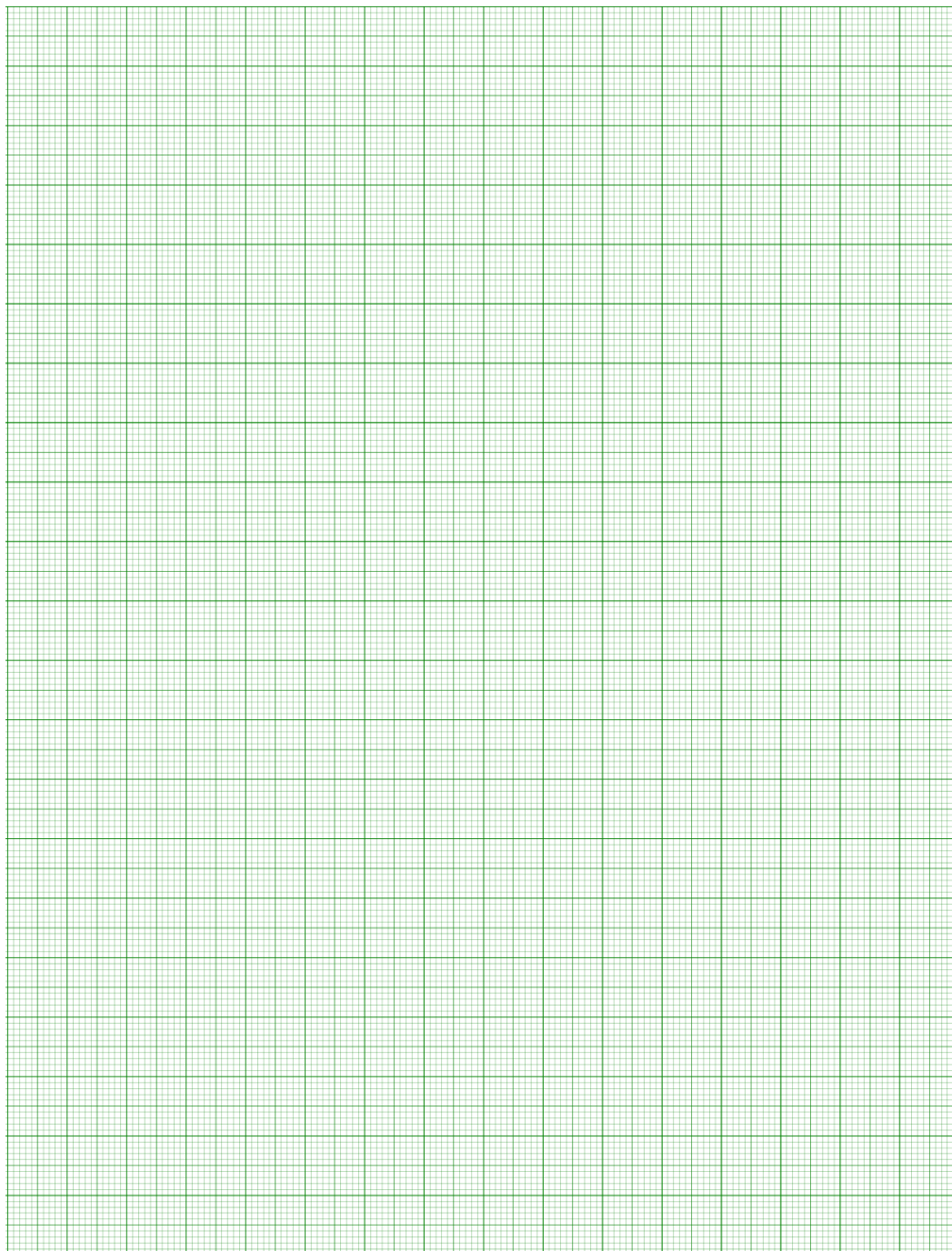
Japanese-Experiments (Japan)

[illegible]

1.2 (cont.)



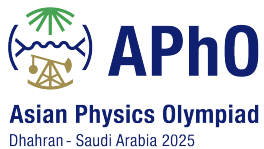
1.2 (cont.)



$(C = 470 \text{ nF}), L =$

$(C = 2200 \text{ }\mu\text{F}), L =$

Experimental Exam



A1-5

Japanese-Experiments (Japan)

1.3 (0.5 pt)

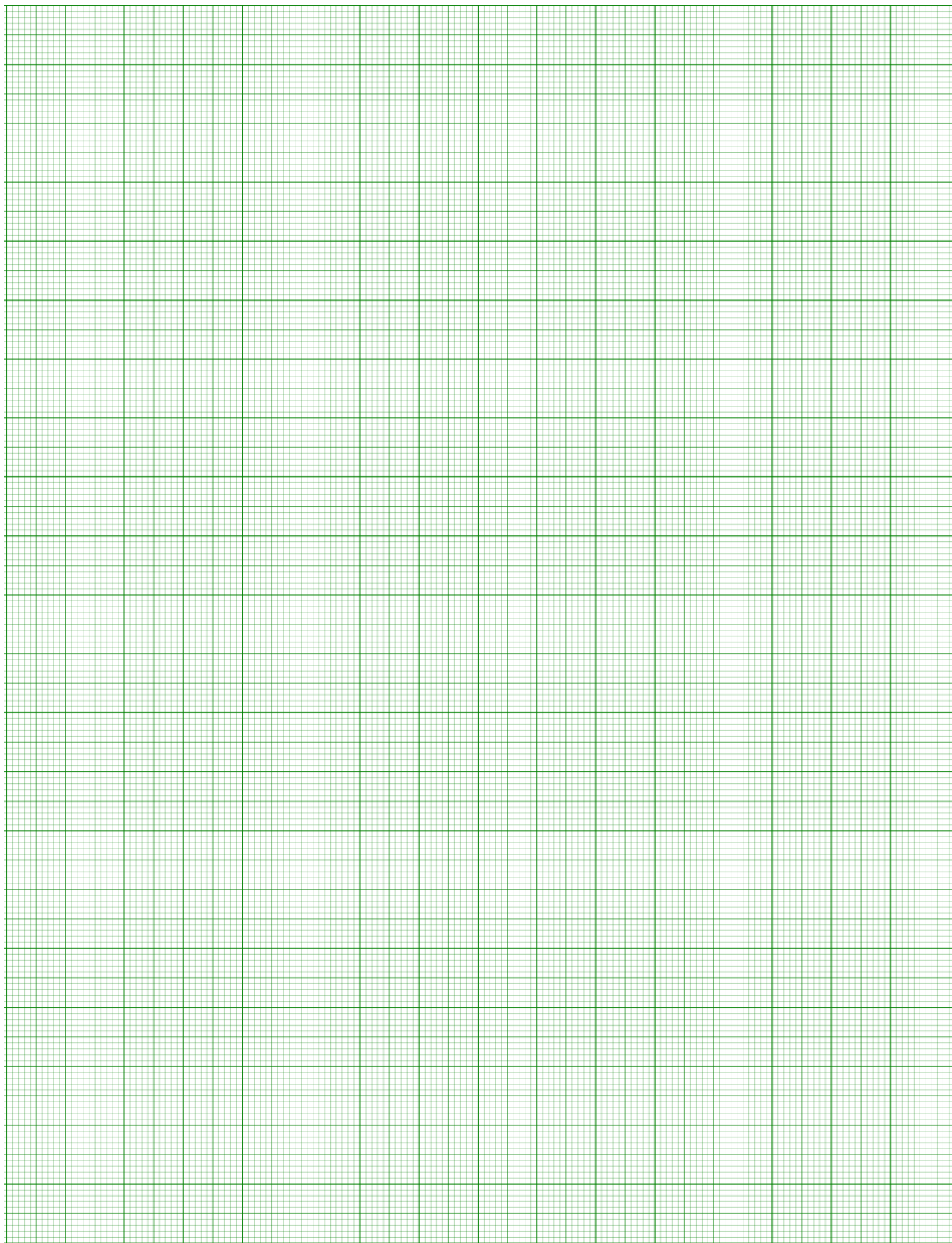
Japanese-Experiments (Japan)

[illegible][illegible]

1.4 (cont.)



1.4 (cont.)

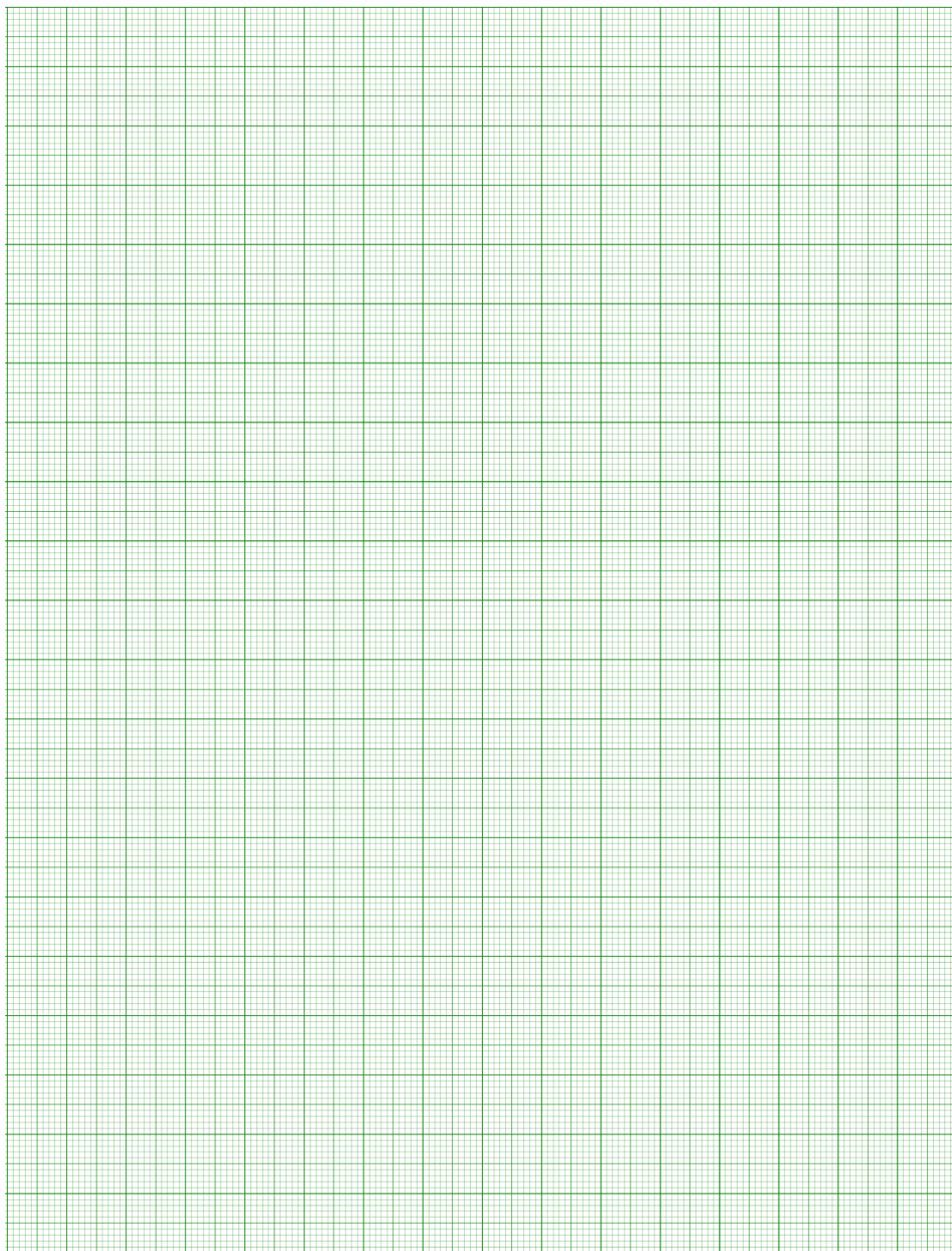


1.4 (cont.)





1.4 (cont.)



APhO
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Dhahran - Saudi Arabia 2025

A1-11

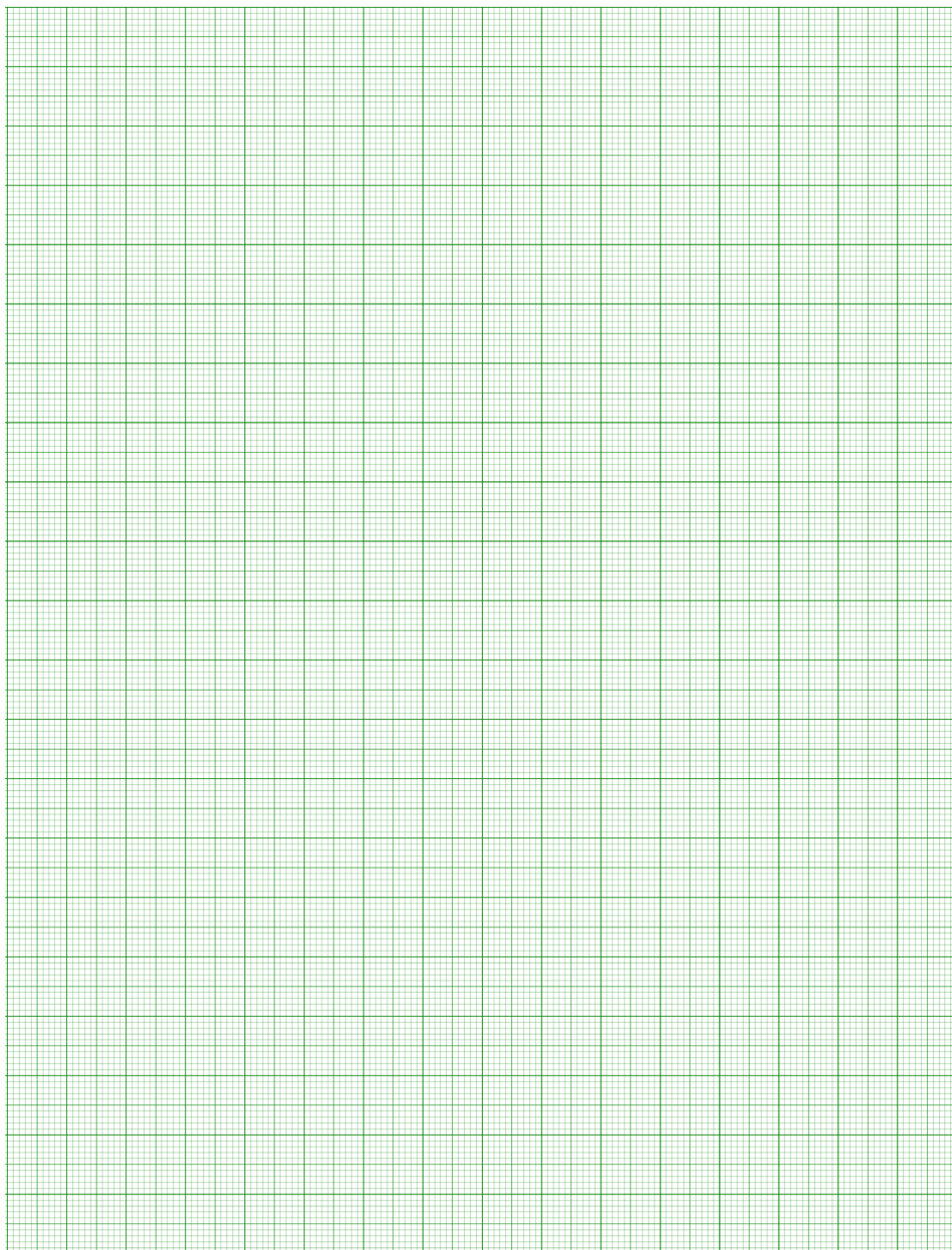
Japanese-Experiments (Japan)

$$R_L(\text{average}) =$$

2.1 (0.4 pt)

[illegible]

2.2 (cont.)



2.2 (cont.)



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Japanese-Experiments (Japan)

$$M =$$
[illegible][illegible]

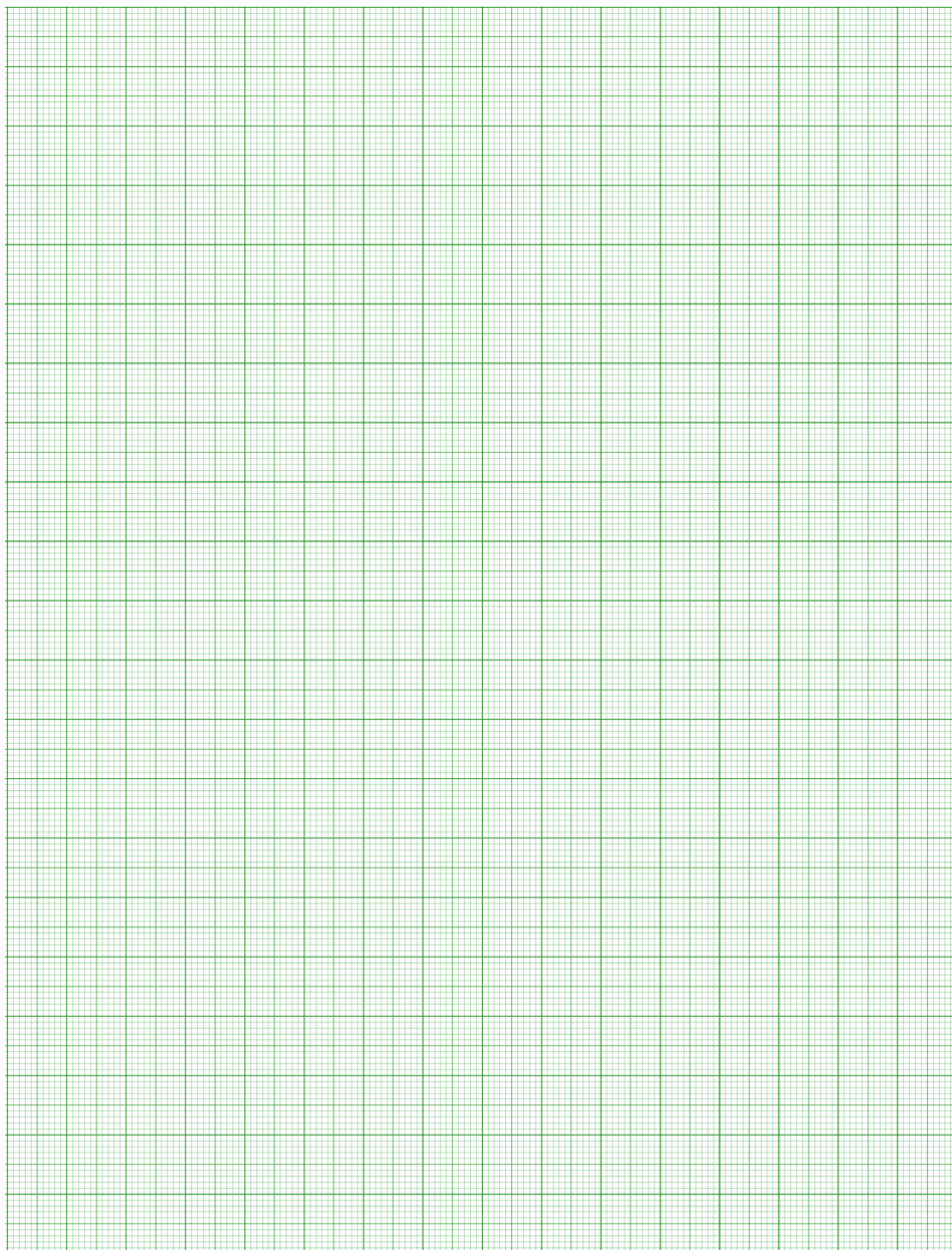
APhO
Asian Physics Olympiad
Dhahran - Saudi Arabia 2025

A1-15

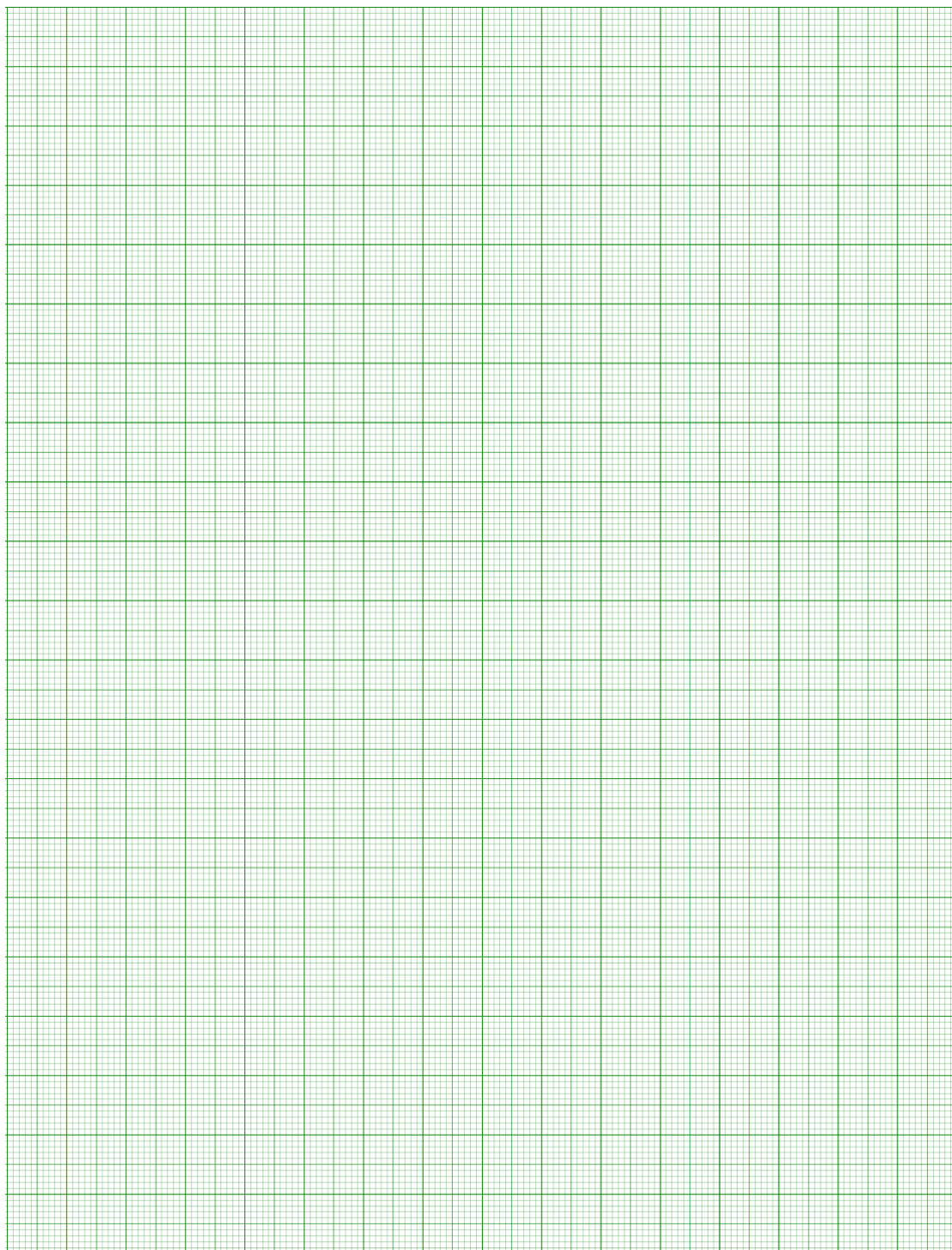
Japanese-Experiments (Japan)

[illegible][illegible]

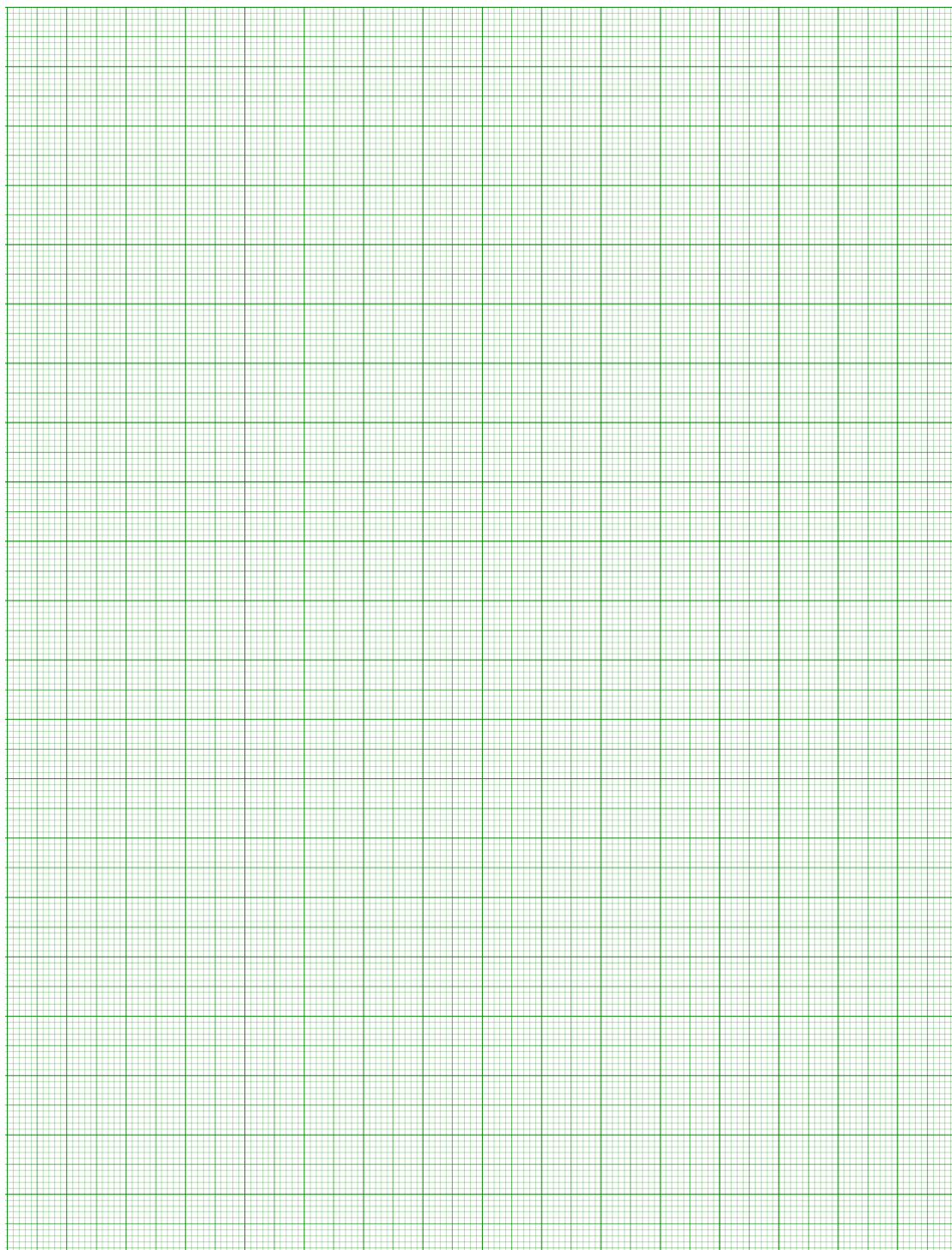
2.4 (cont.)



2.4 (cont.)



2.4 (cont.)



2.4 (cont.)



2.4 (cont.)

良いデータが得られない金属を 1 つ選んでチェックマークを付けよ:

☐ SS410

☐ SS304

☐ Cu

☐ Al

$n =$

$n =$

$n =$

2.5 (0.2 pt)

$m =$

2.6 (0.6 pt)

$\sigma =$

$\sigma =$

$\sigma =$

C.3. : 比熱（比熱容量）と実効負荷抵抗 (7.4 pts)

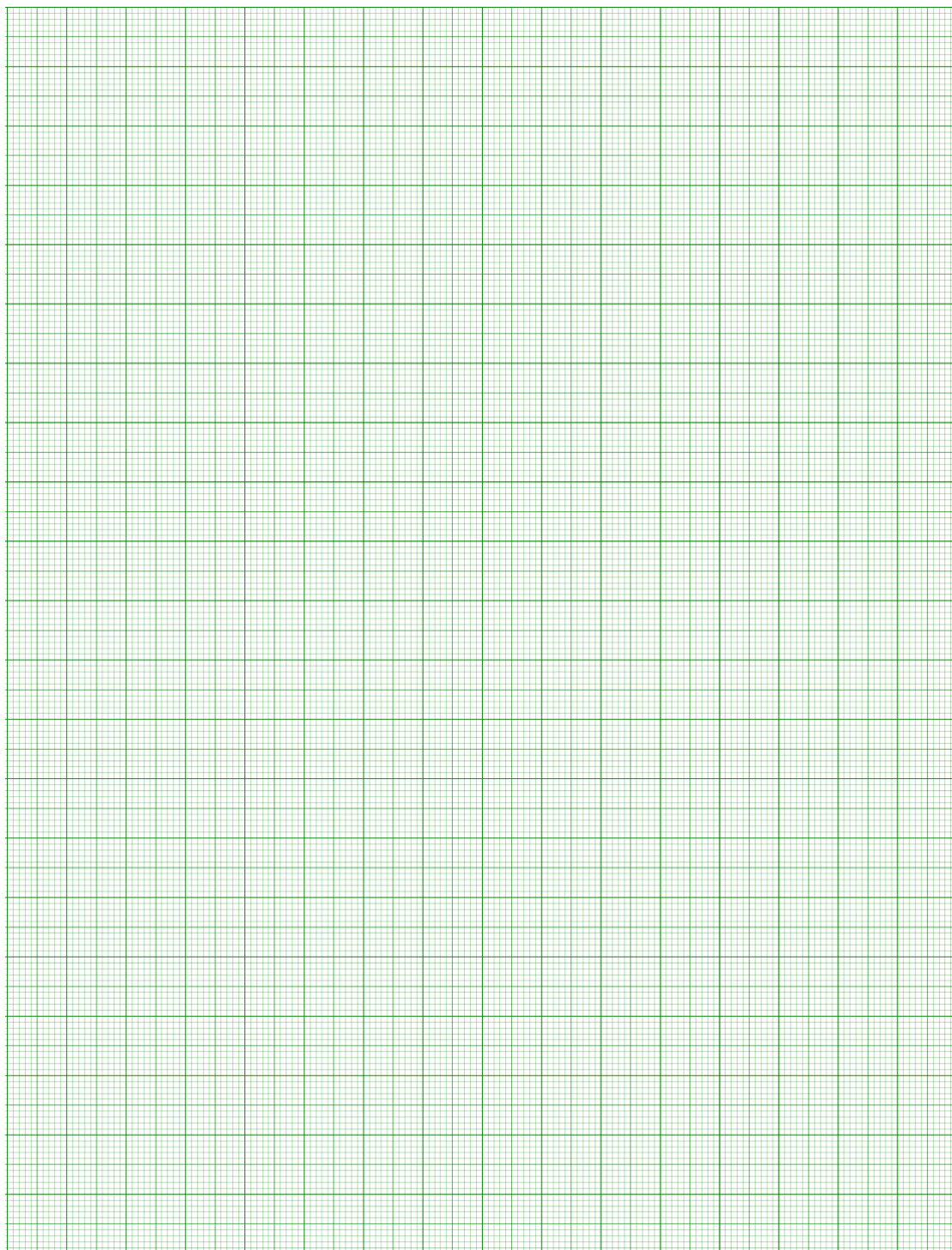
3.1 (0.2 pt)

3.2 (0.5 pt)

Japanese-Experiments (Japan)

[illegible]

3.3 (cont.)



$c_{Al} =$

Japanese-Experiments (Japan)

[illegible]

3.4 (cont.)



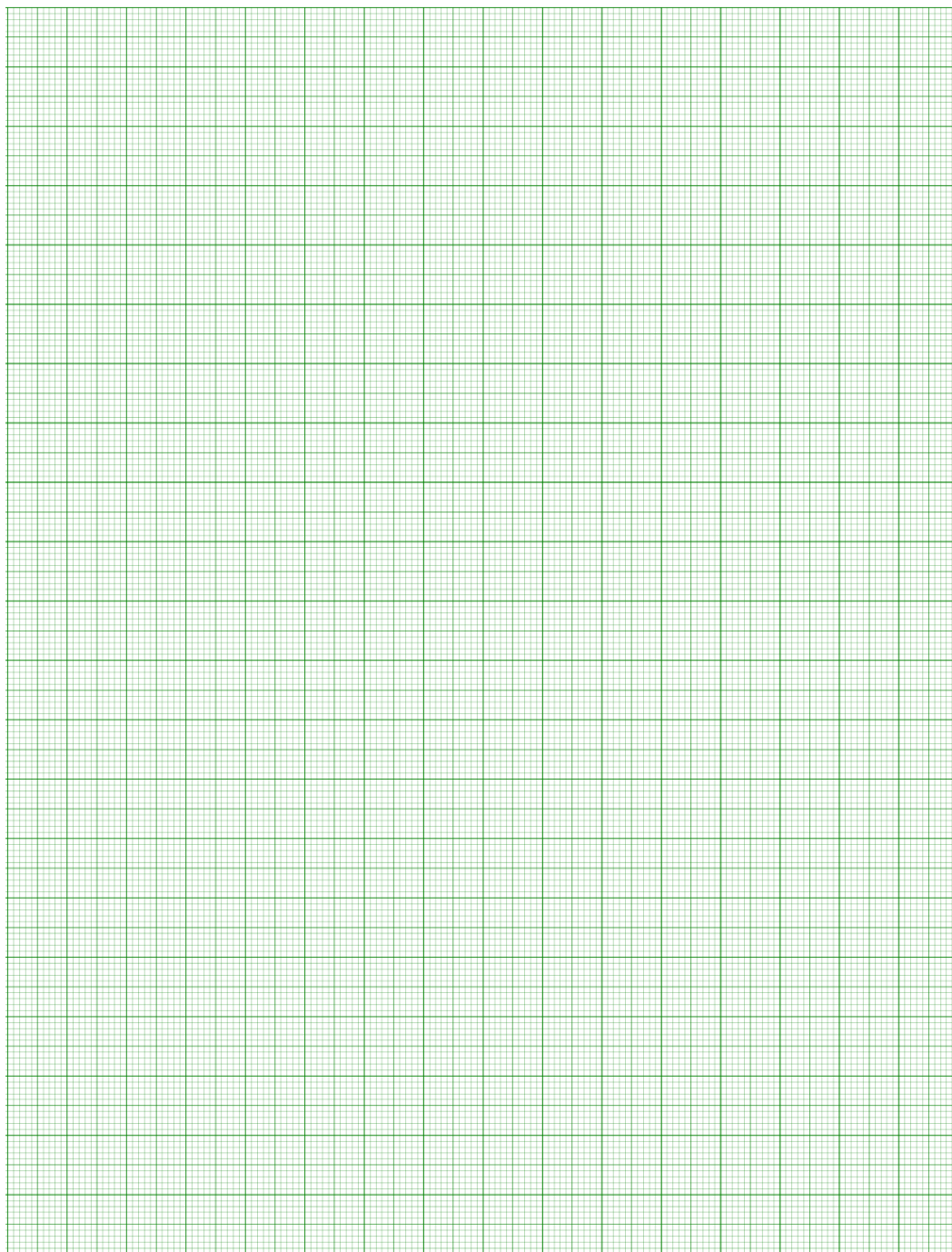
$c_{SS410} =$

A1-25

Japanese-Experiments (Japan)

[illegible]

3.5 (cont.)

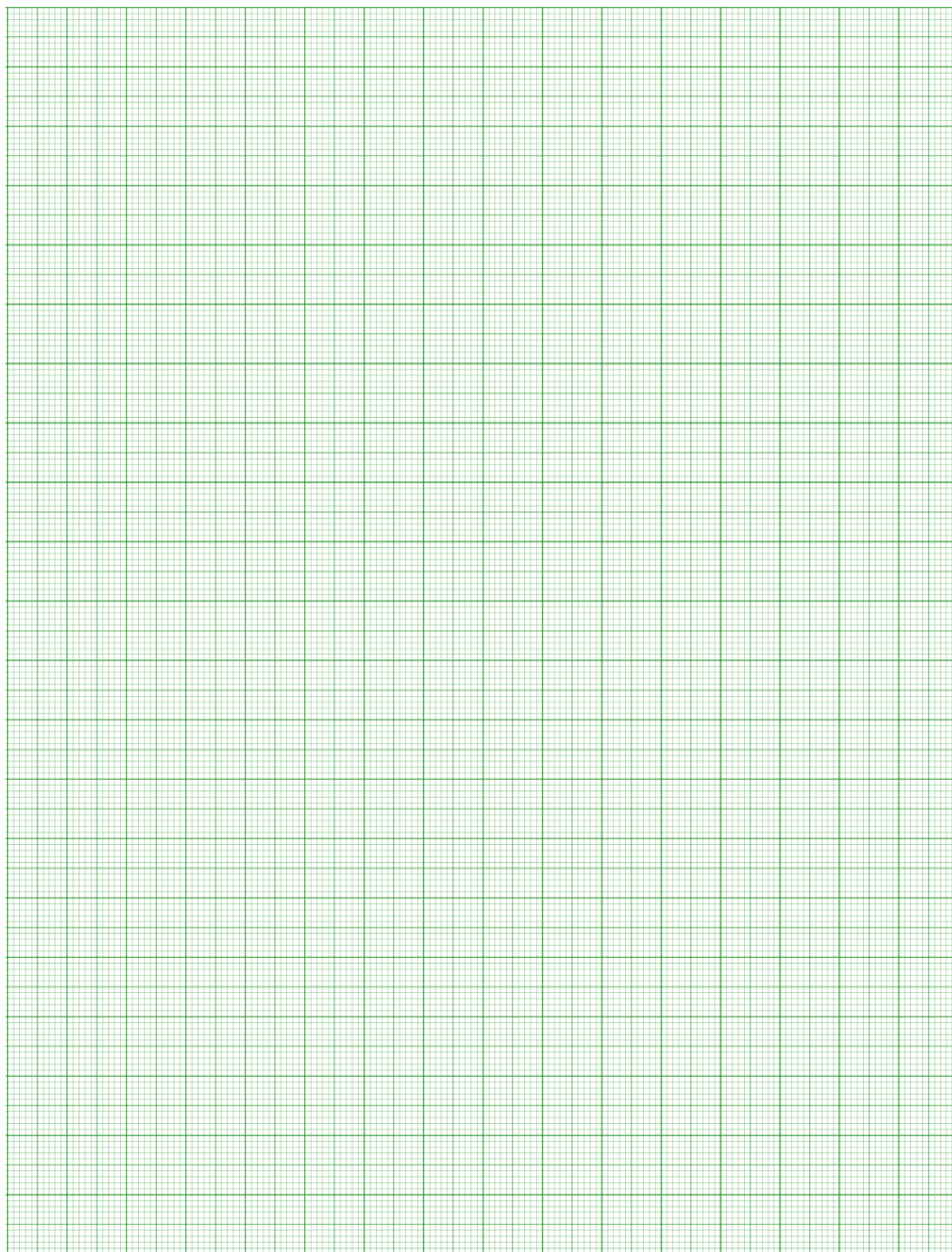


$R_{LOAD} =$

Japanese-Experiments (Japan)

[illegible]

3.6 (cont.)



$R_{LOAD} =$

Experimental Exam



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A1-29

Japanese-Experiments (Japan)

3.7 (0.1 pt)

☐ (a)

☐ (b)

3.8 (0.1 pt)

☐ (a)

☐ (b)

☐ (c)

☐ (d)

☐ (e)

3.9 (0.4 pt)

η_{Al} =

η_{SS410} =