

Paper Reference(s) 1PH0/2F
Pearson Edexcel Level 1/Level 2 GCSE (9–1)

Physics
PAPER 2
Foundation Tier

Friday 14 June 2024 – Afternoon

Time: 1 hour 45 minutes

Diagram Booklet

**THIS DIAGRAM BOOKLET MUST BE
RETURNED WITH THE QUESTION PAPER
AT THE END OF THE EXAMINATION.**

In the boxes below, write your name, centre number and candidate number.

| | | | | | |
|------------------|--|--|--|--|--|
| Surname | | | | | |
| Other names | | | | | |
| Centre Number | | | | | |
| Candidate Number | | | | | |

INSTRUCTIONS

There may be spare copies of some diagrams in case you need them.

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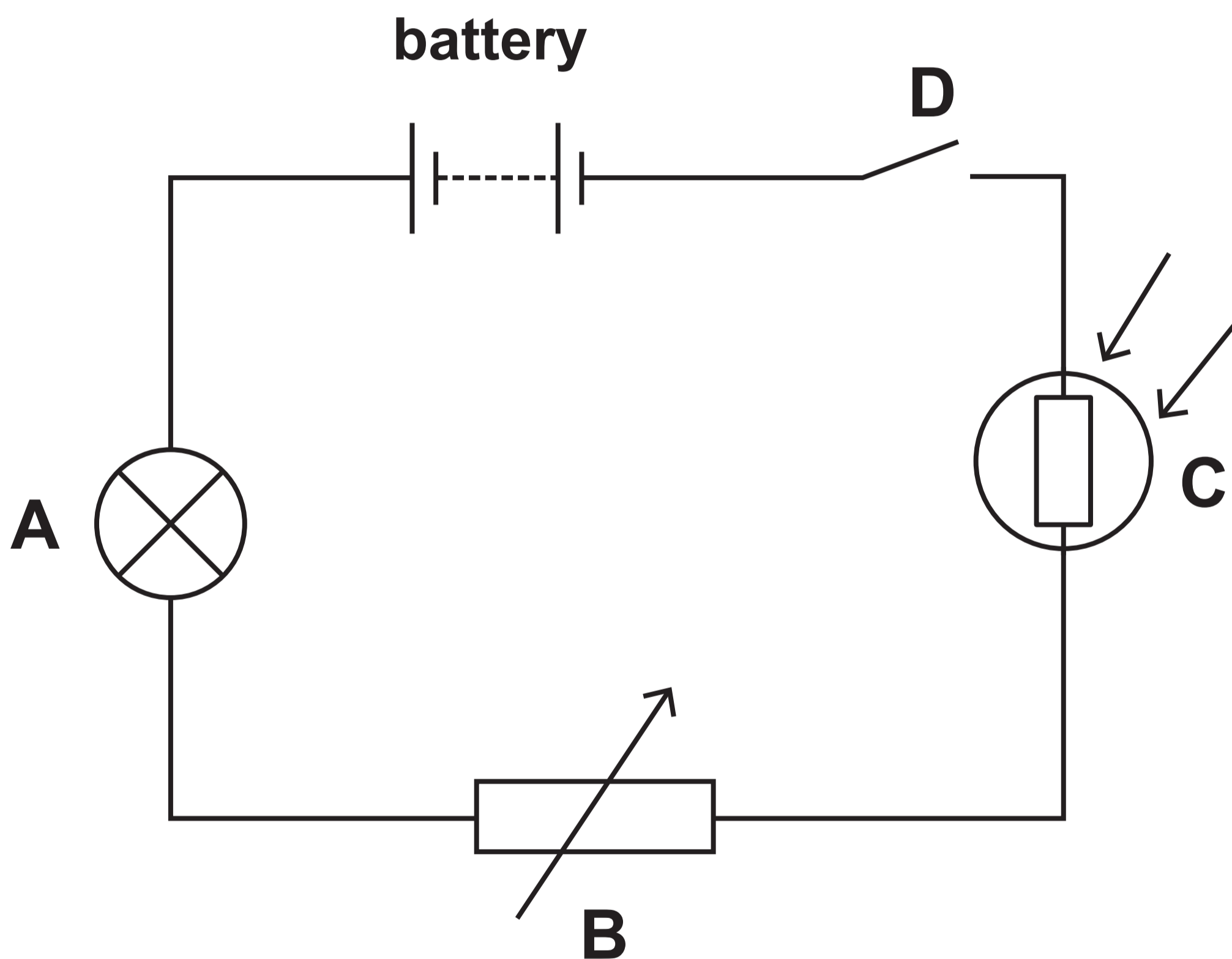
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Question 1(a)

FIGURE 1



Question 1(a)

ammeter

lamp

LDR

switch

thermistor

variable resistor

Question 2(a)

FIGURE 2

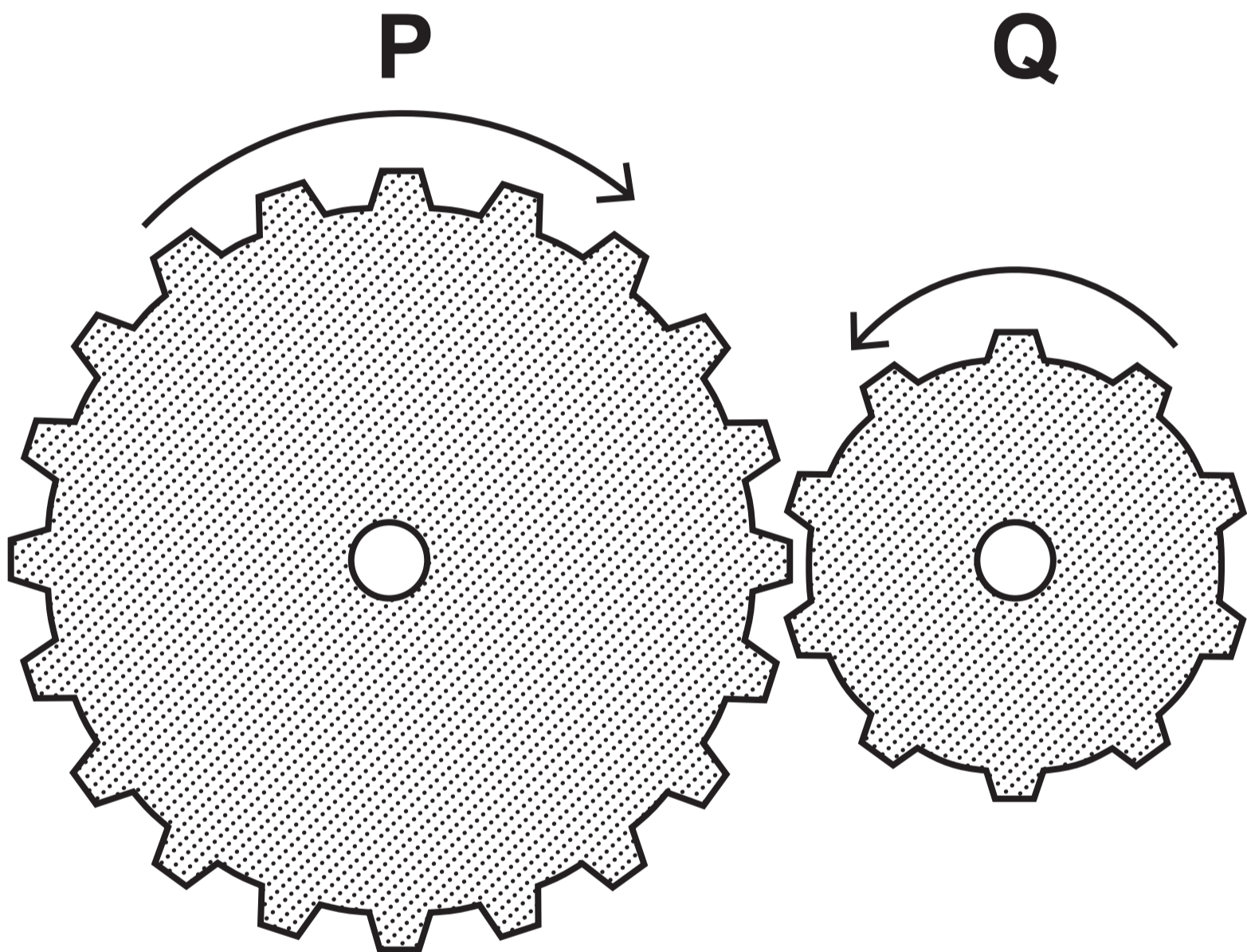
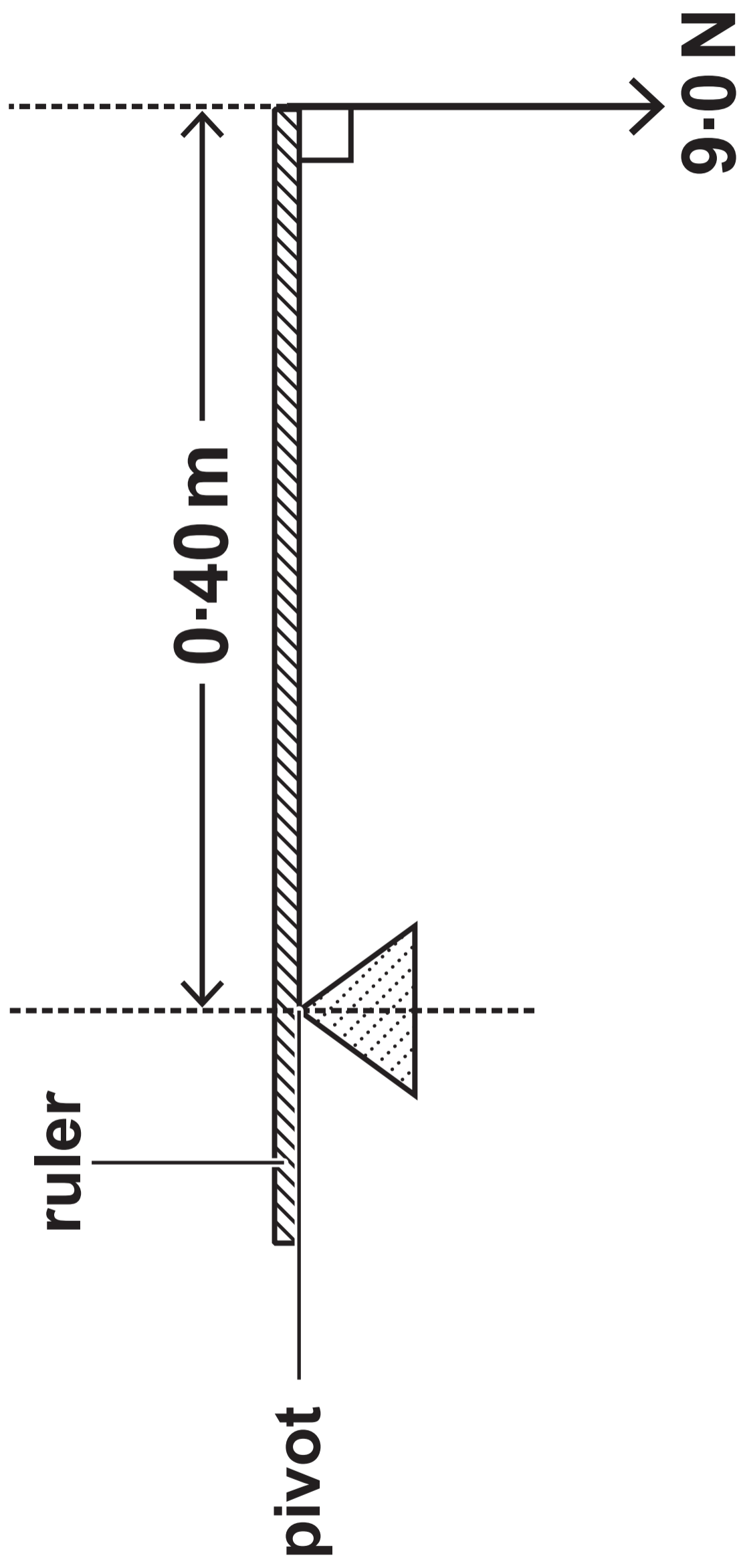
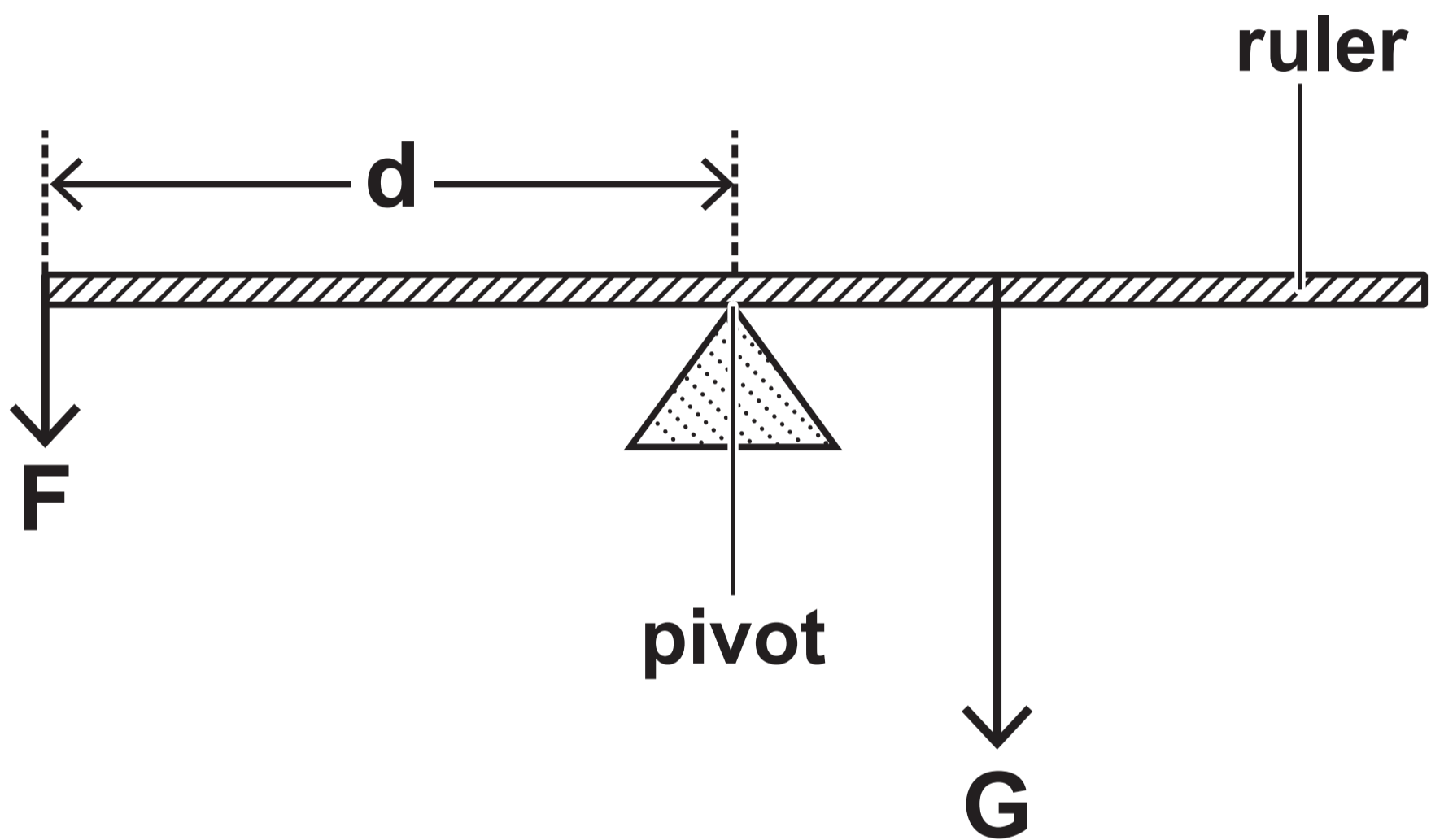


FIGURE 3



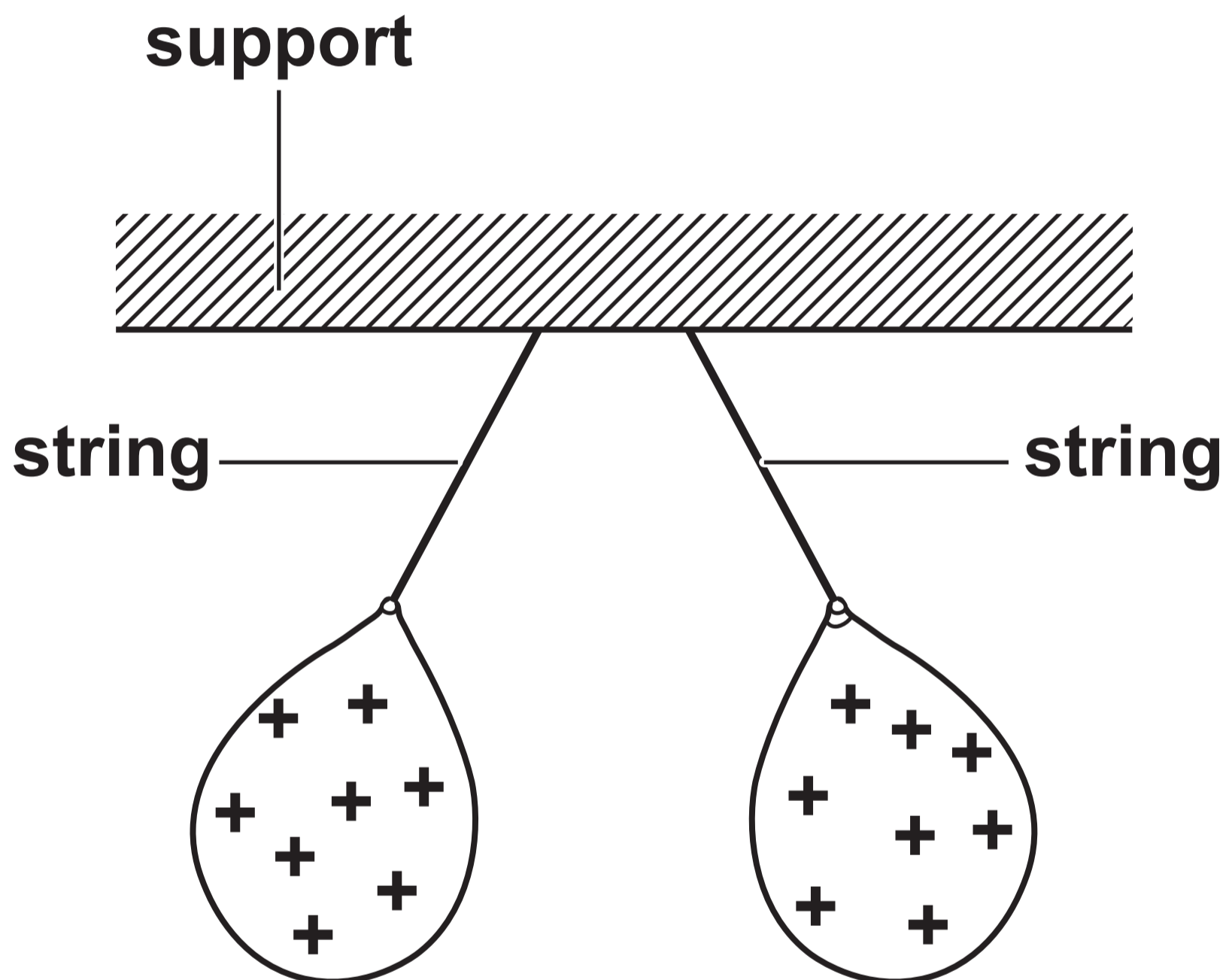
Question 2(c)

FIGURE 4



Question 3

FIGURE 5



Question 3(a)

ampere

attract

coulomb

electrons

negative

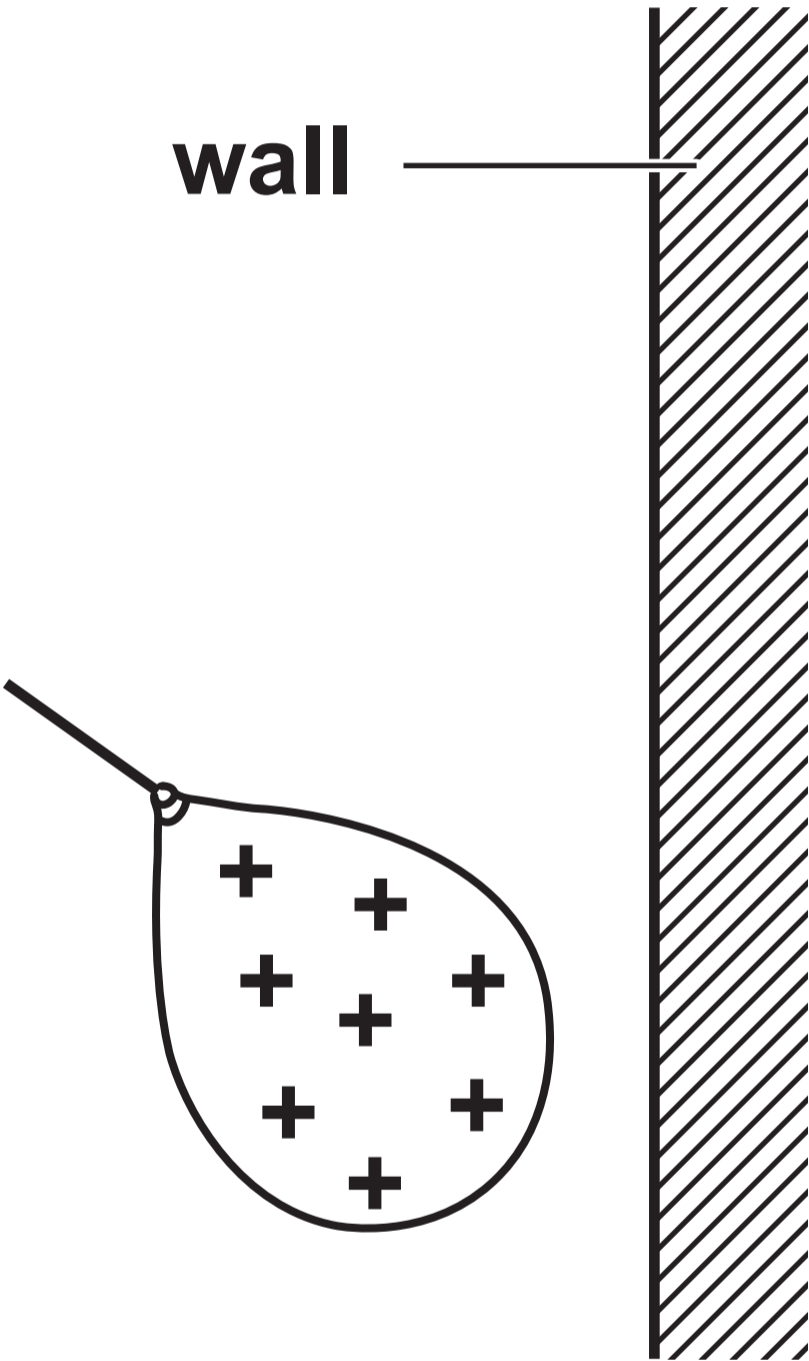
positive

protons

repel

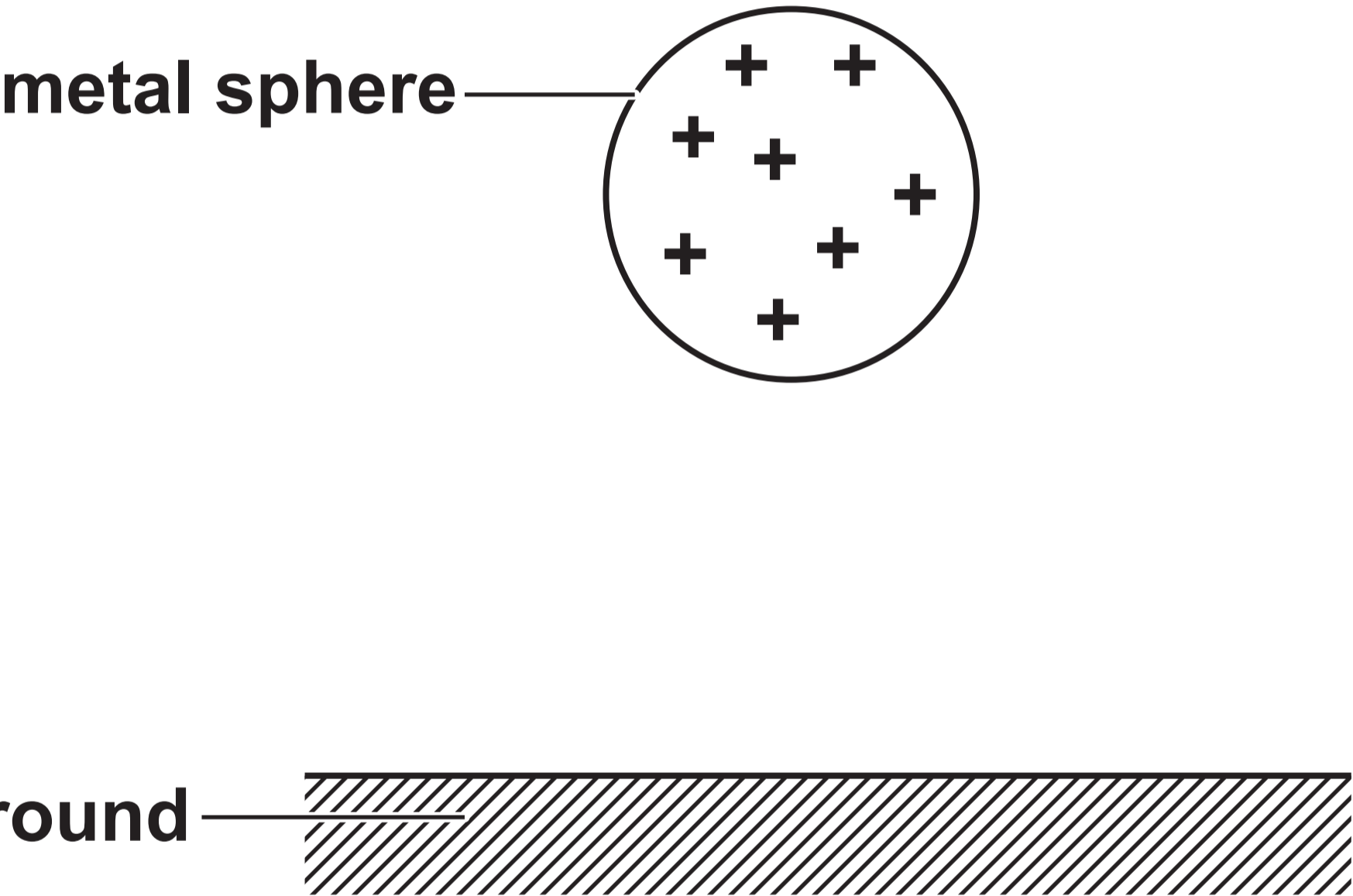
Question 3(b)

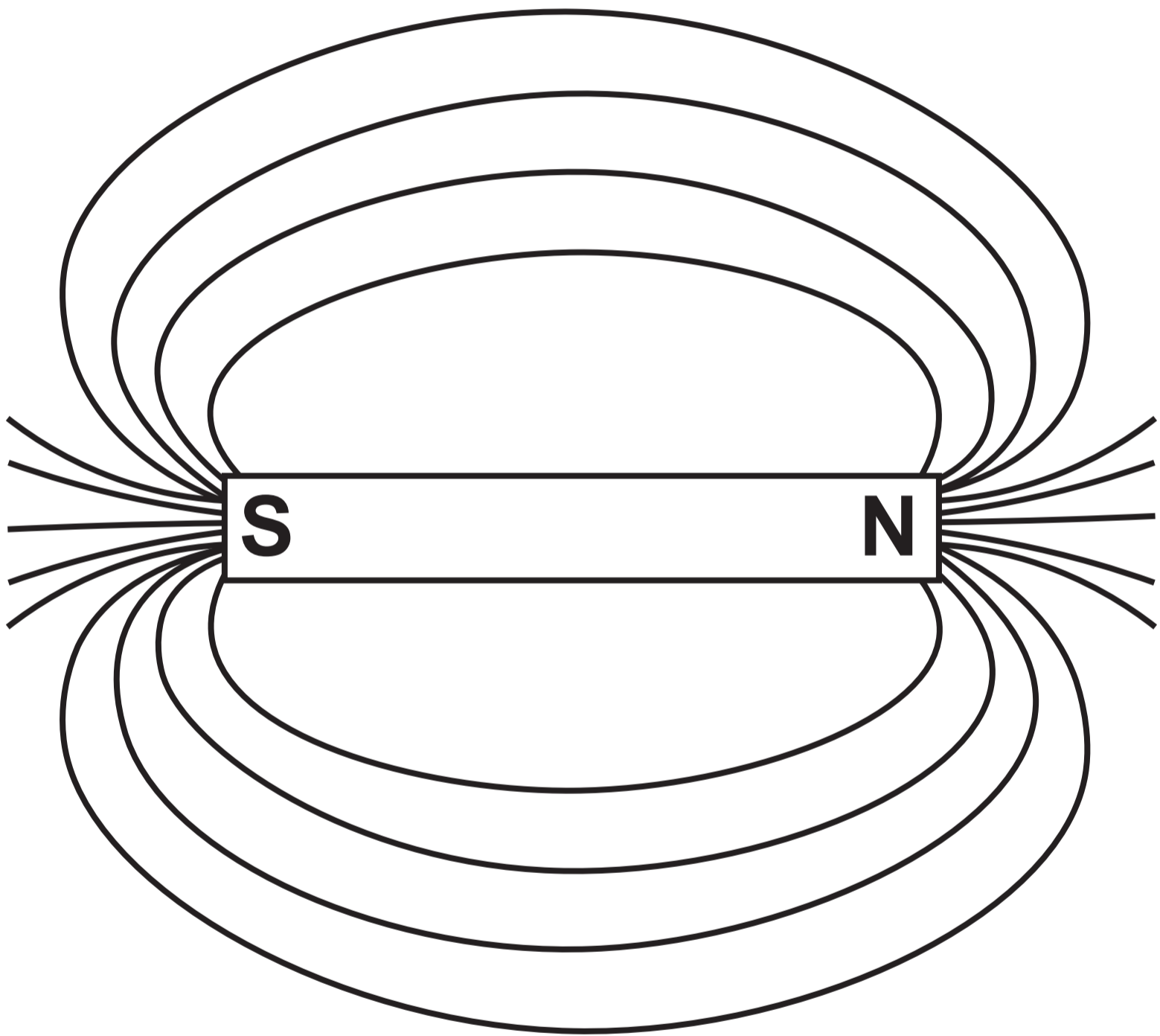
FIGURE 6



Question 3(c)

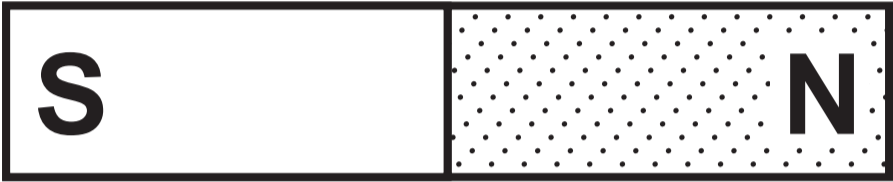
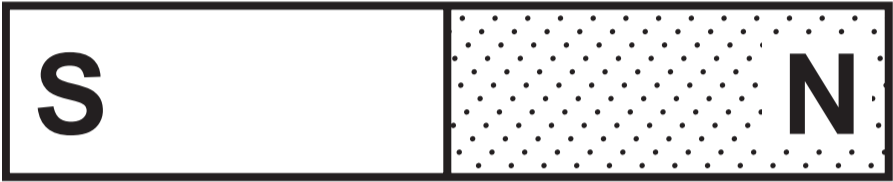
FIGURE 7



Question 4(a)**FIGURE 8**

Question 4(b)

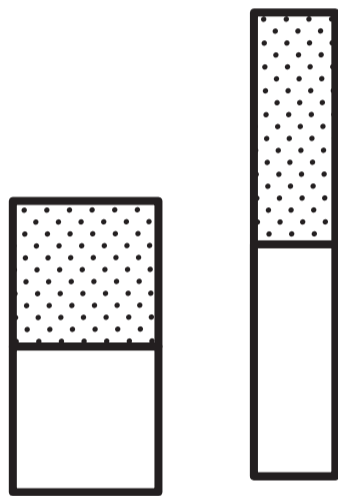
FIGURE 9



Question 4(c)

FIGURE 10

two permanent magnets



paper clips

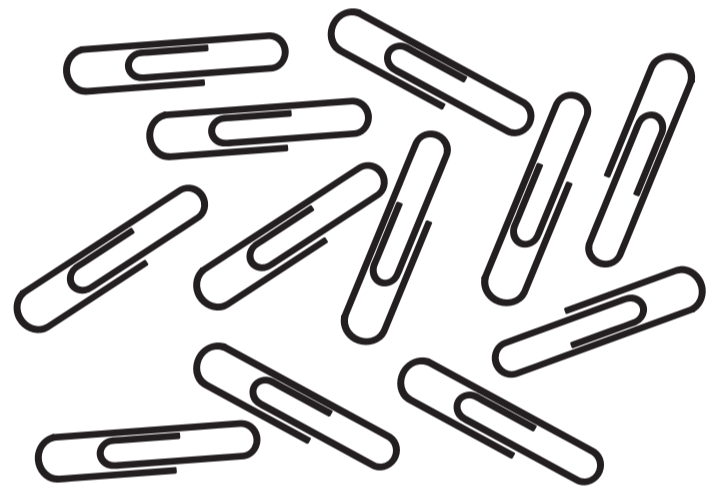
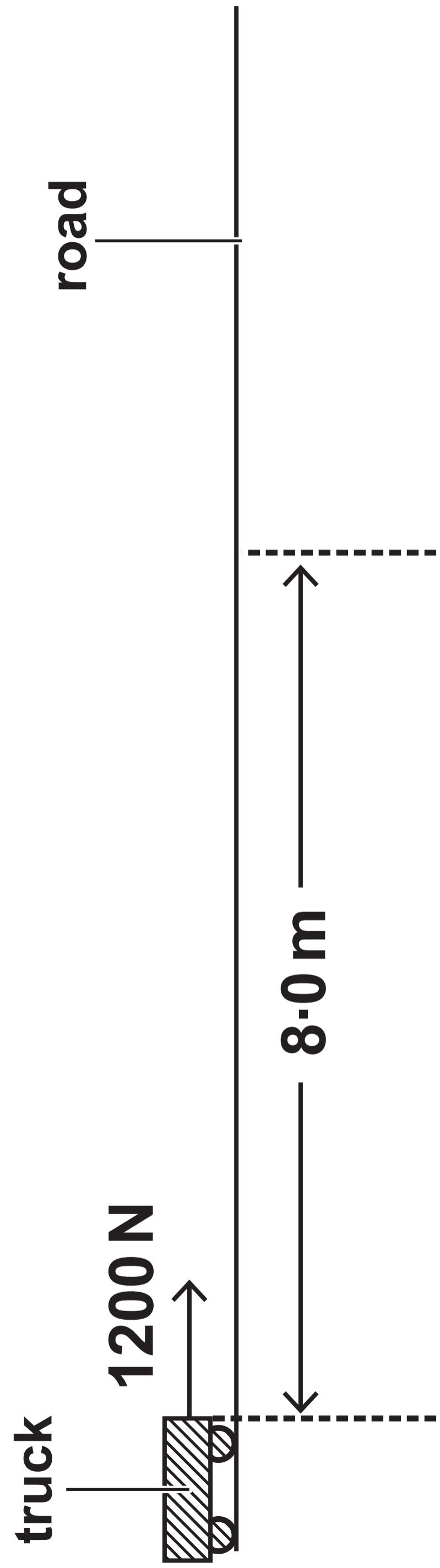
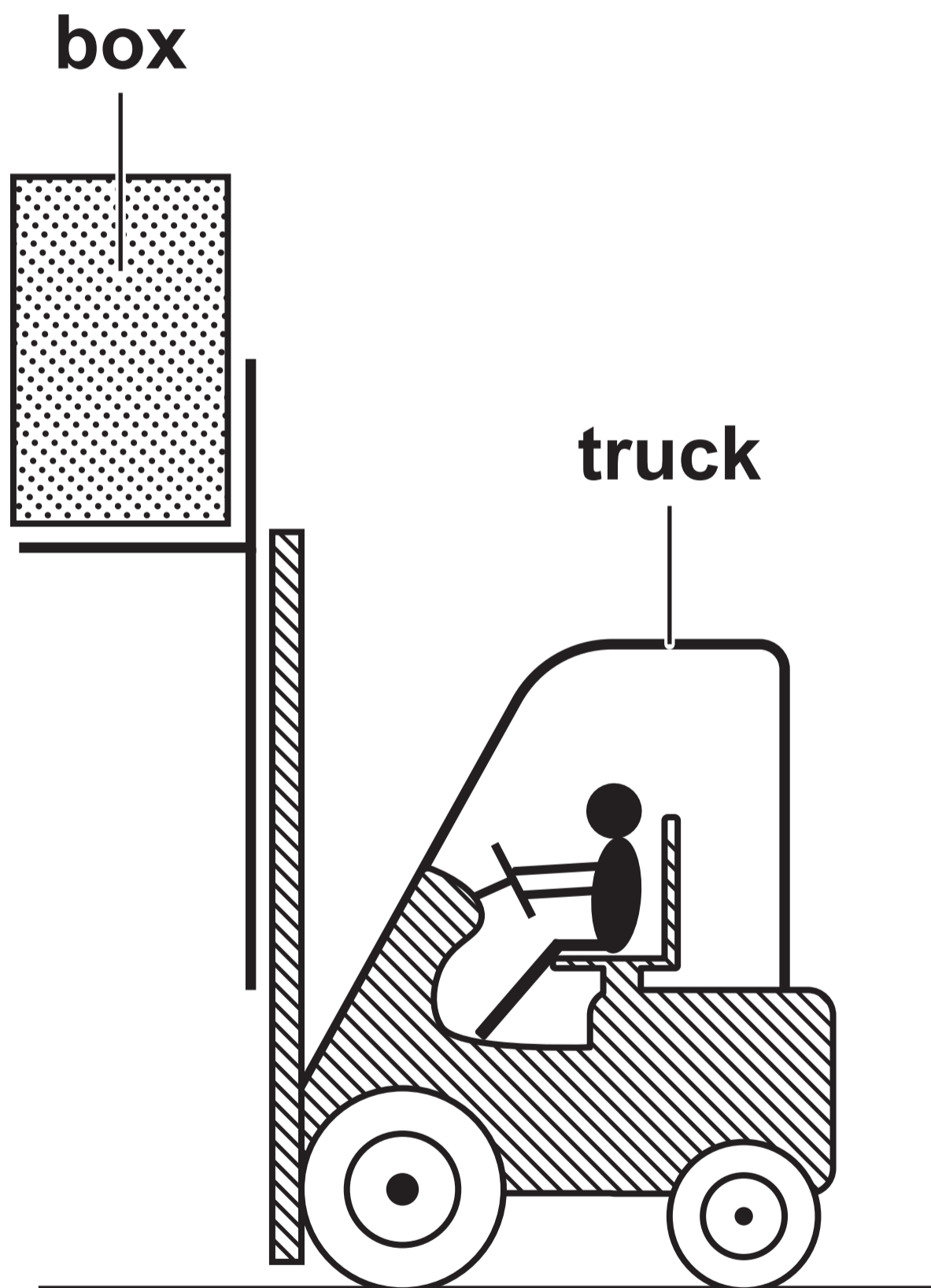


FIGURE 11

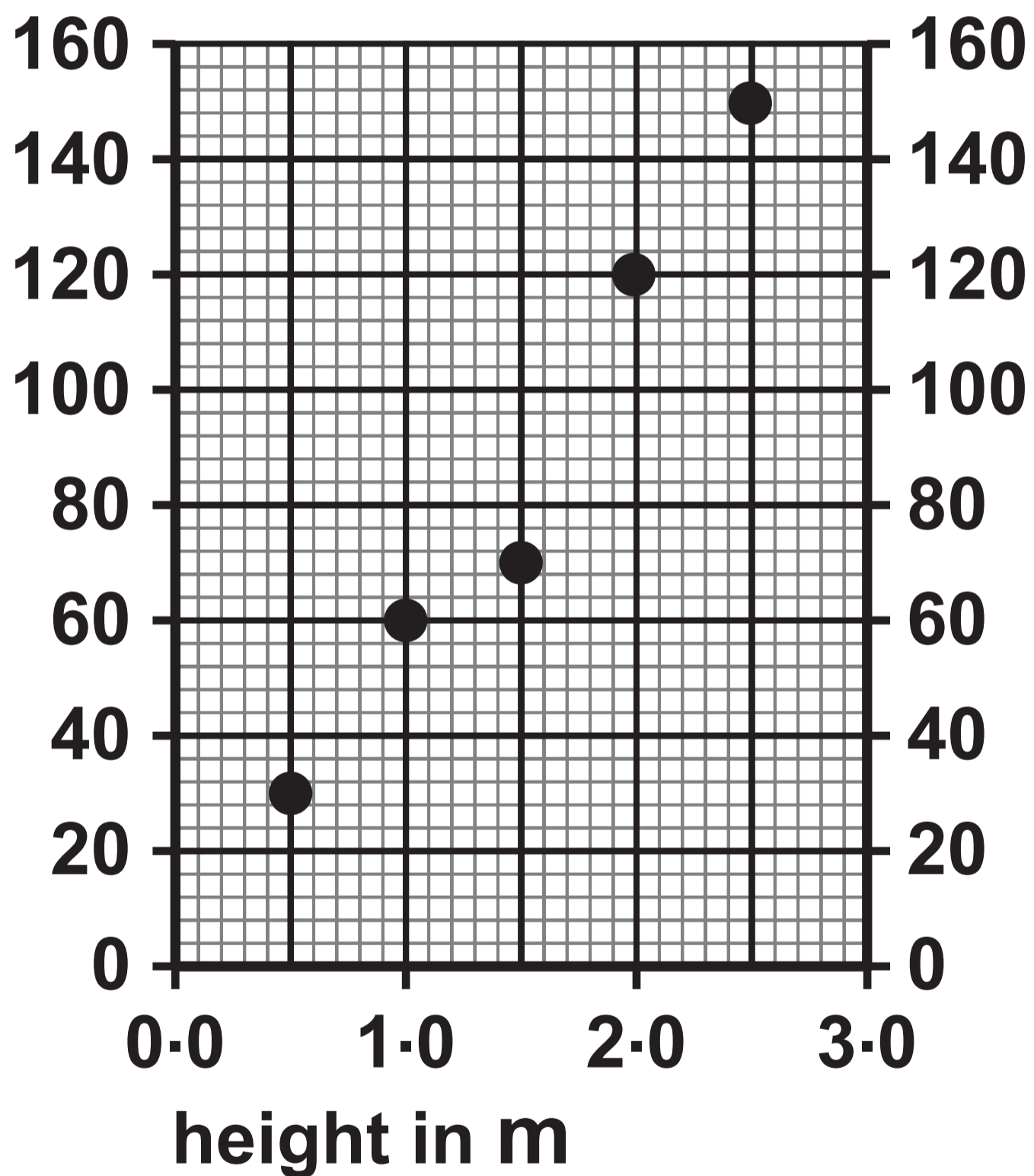


Question 5(c)**FIGURE 12**

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Question 5(c) continued.

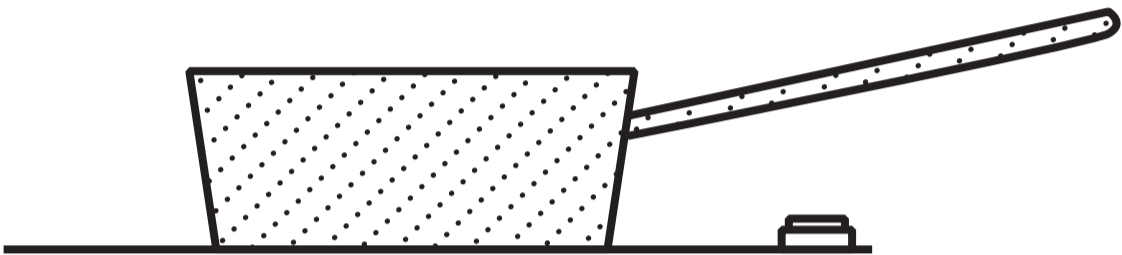
FIGURE 13

 $\Delta\text{GPE in J}$ 

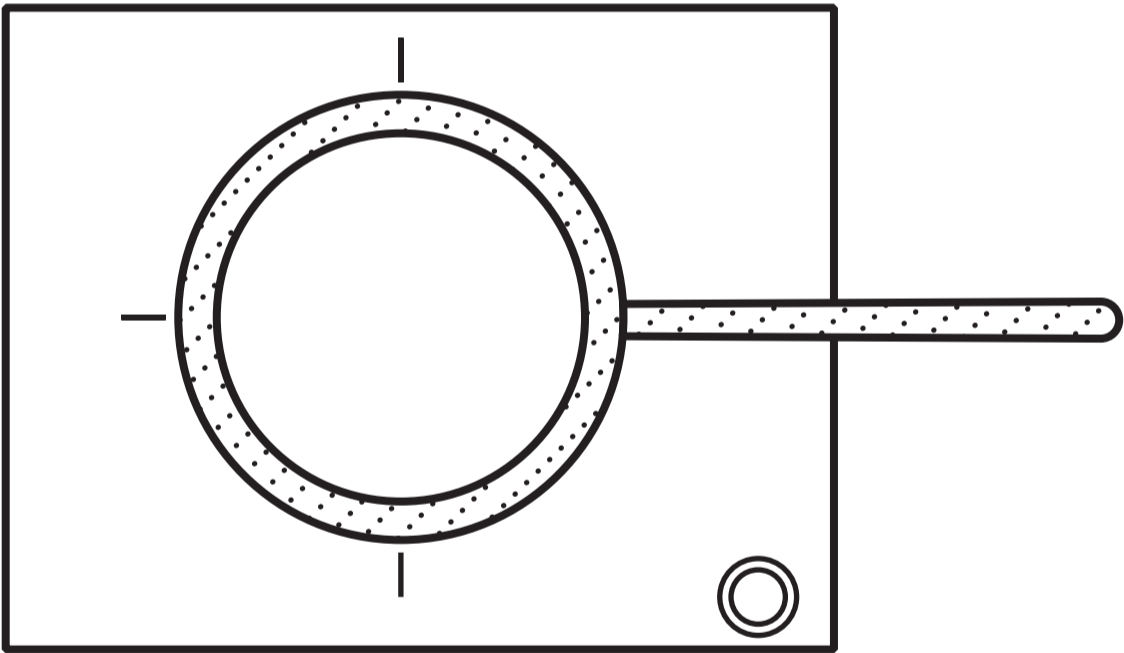
Question 6

FIGURE 14

SIDE VIEW



TOP VIEW



Question 6(a)

FIGURE 15

| | |
|----------------------------------|----------|
| mass of milk | 0·82 kg |
| starting temperature of milk | 10 °C |
| final temperature of milk | 40 °C |
| change in thermal energy of milk | 96 000 J |

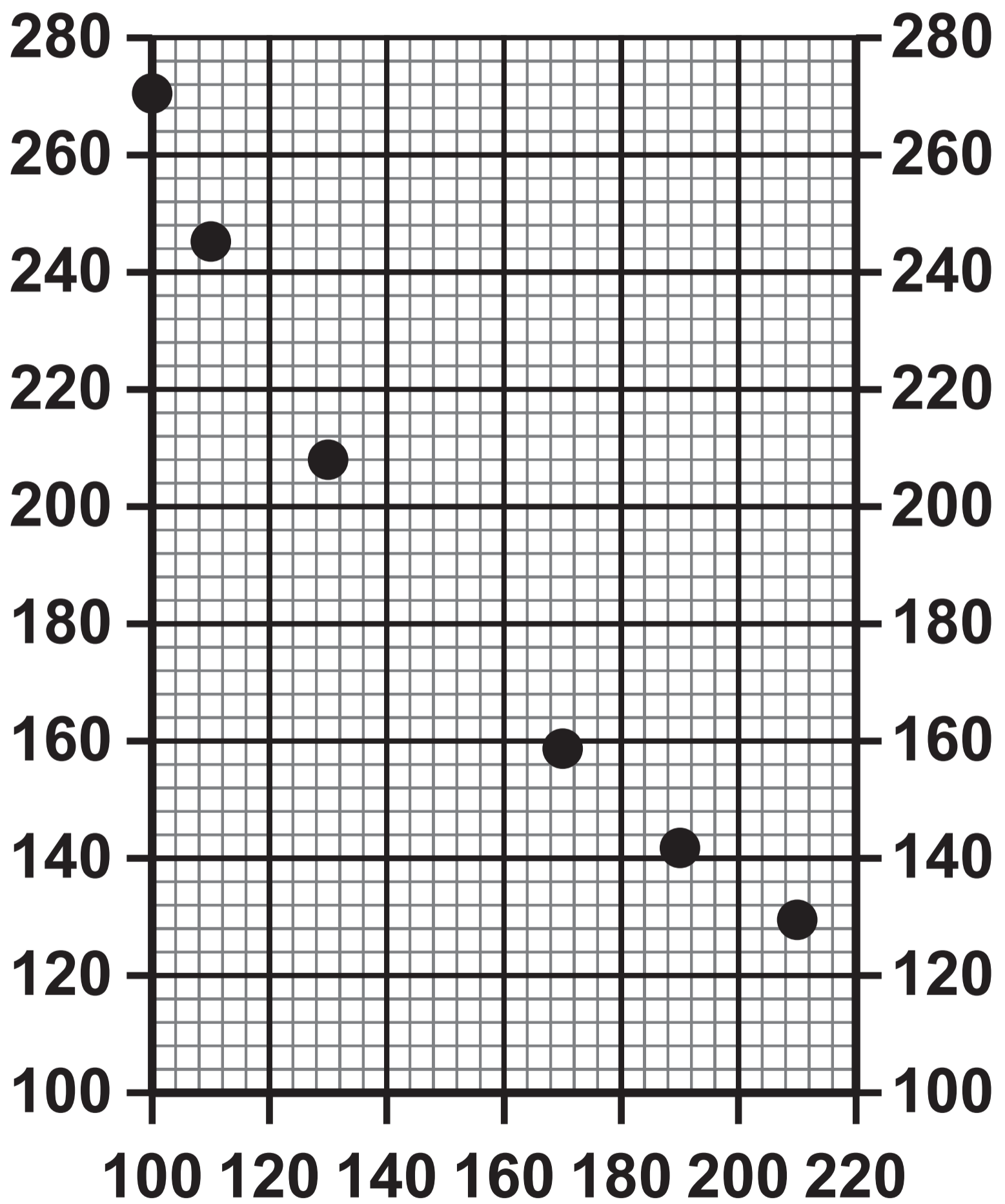
Question 7(a)

FIGURE 16

| pressure in kPa | volume in cm ³ |
|--------------------|------------------------------|
| 100 | 270 |
| 110 | 245 |
| 130 | 208 |
| 150 | 180 |
| 170 | 159 |
| 190 | 142 |
| 210 | 129 |

Question 7(a)

FIGURE 17

volume in cm^3 

pressure in kPa

Question 7(b)(i)

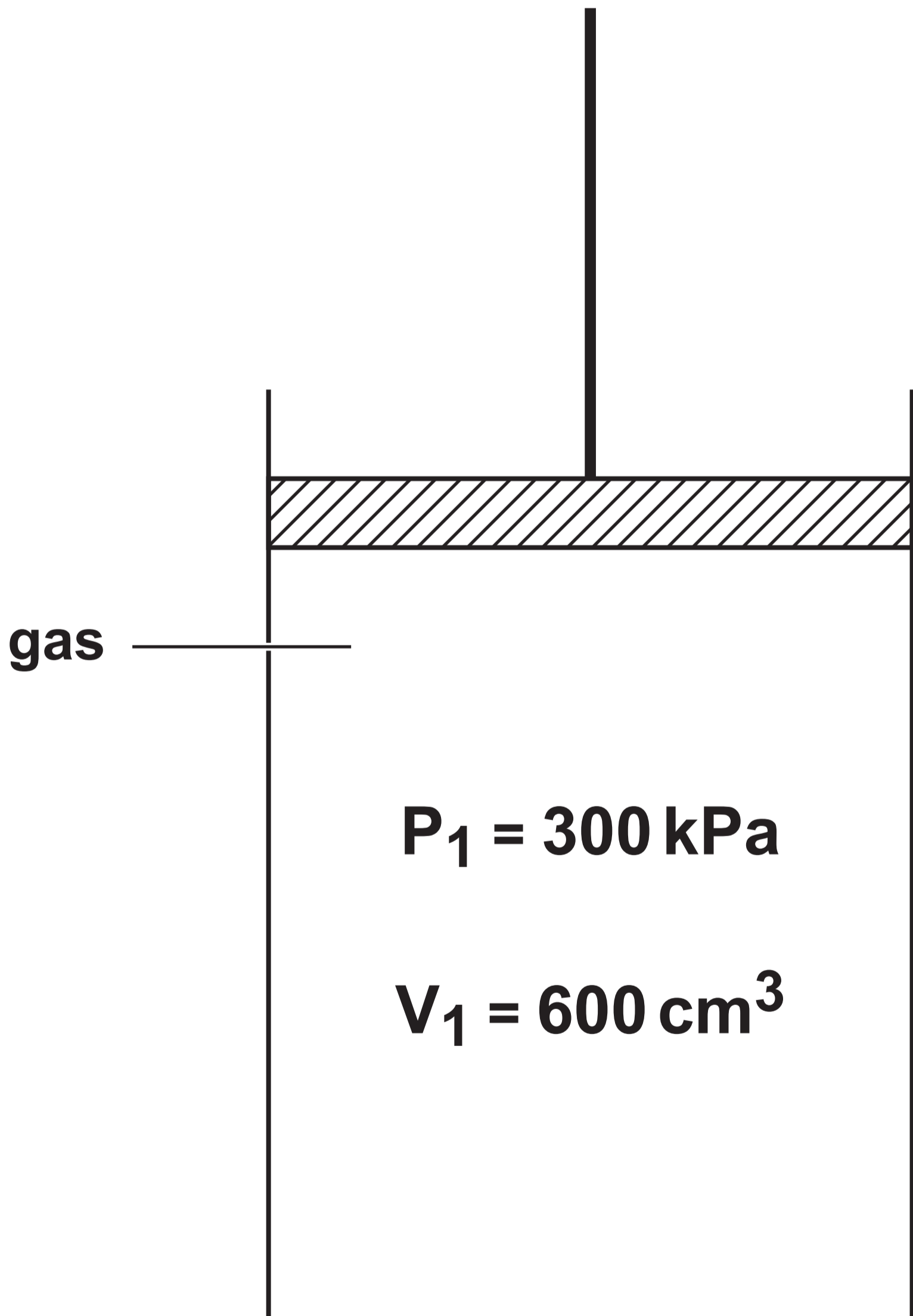
Not to scale

FIGURE 18



Question 7(b)(ii)

FIGURE 19A



(continued on the next page)

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Question 7(b)(ii)

FIGURE 19B

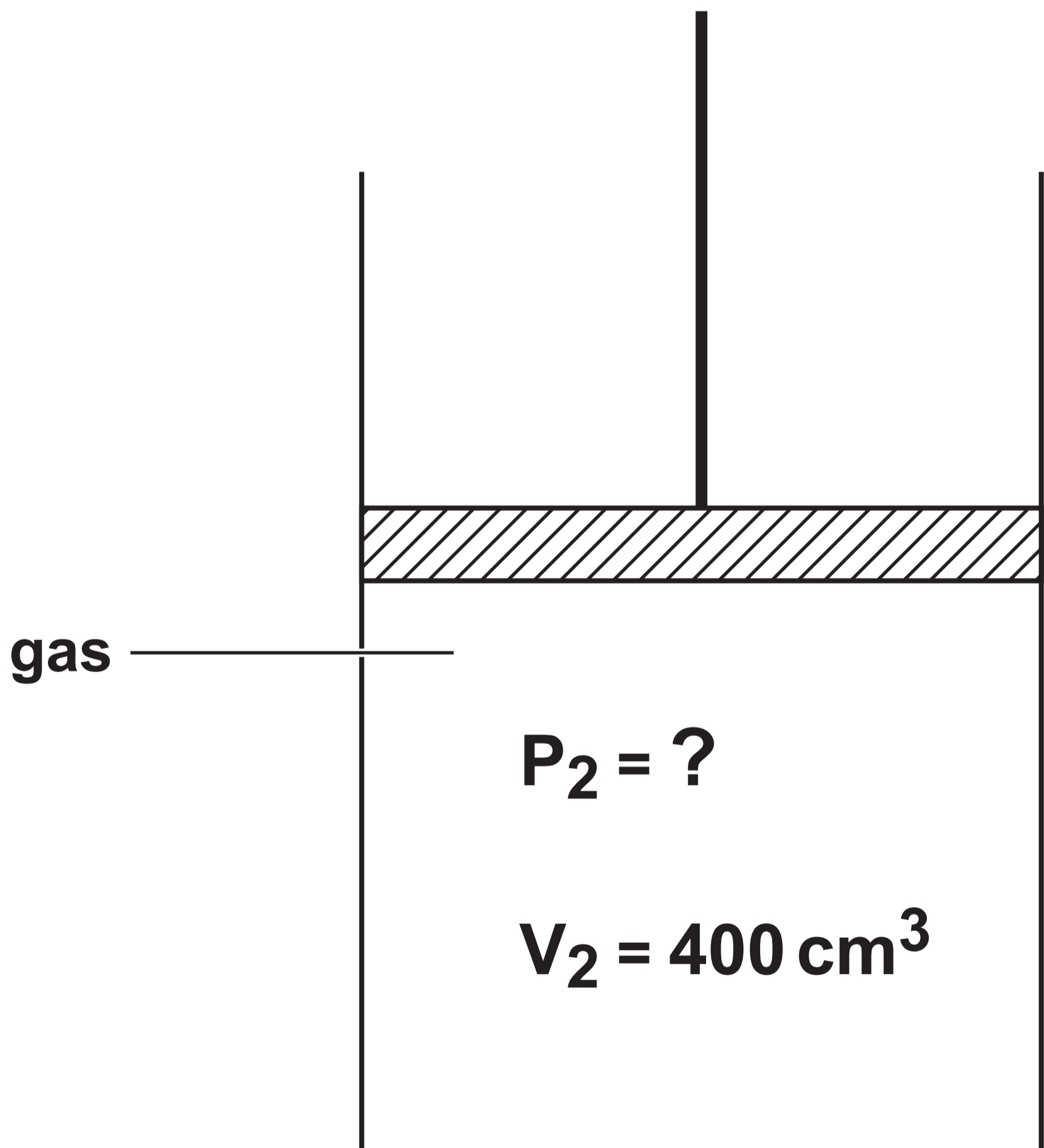
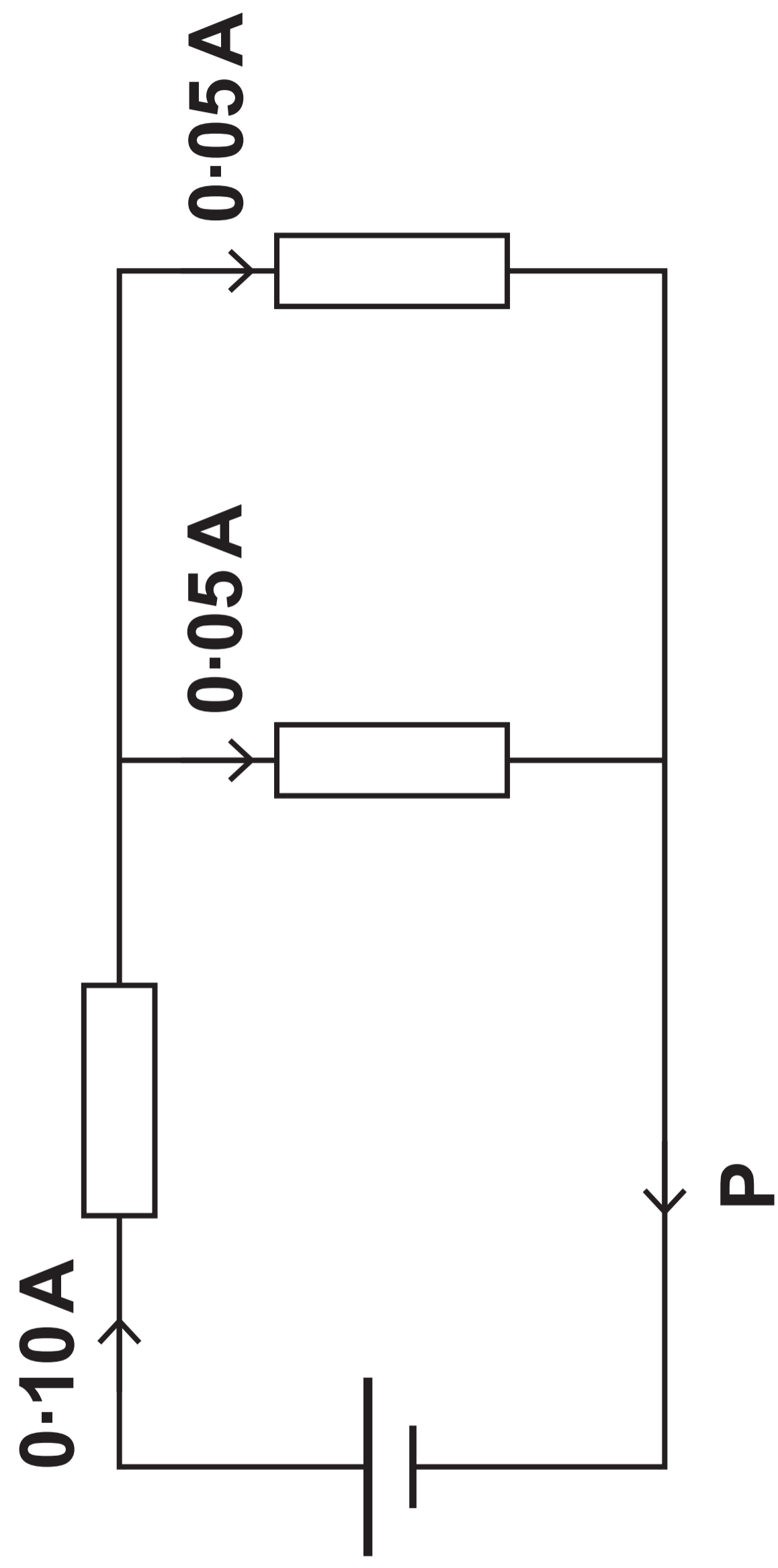
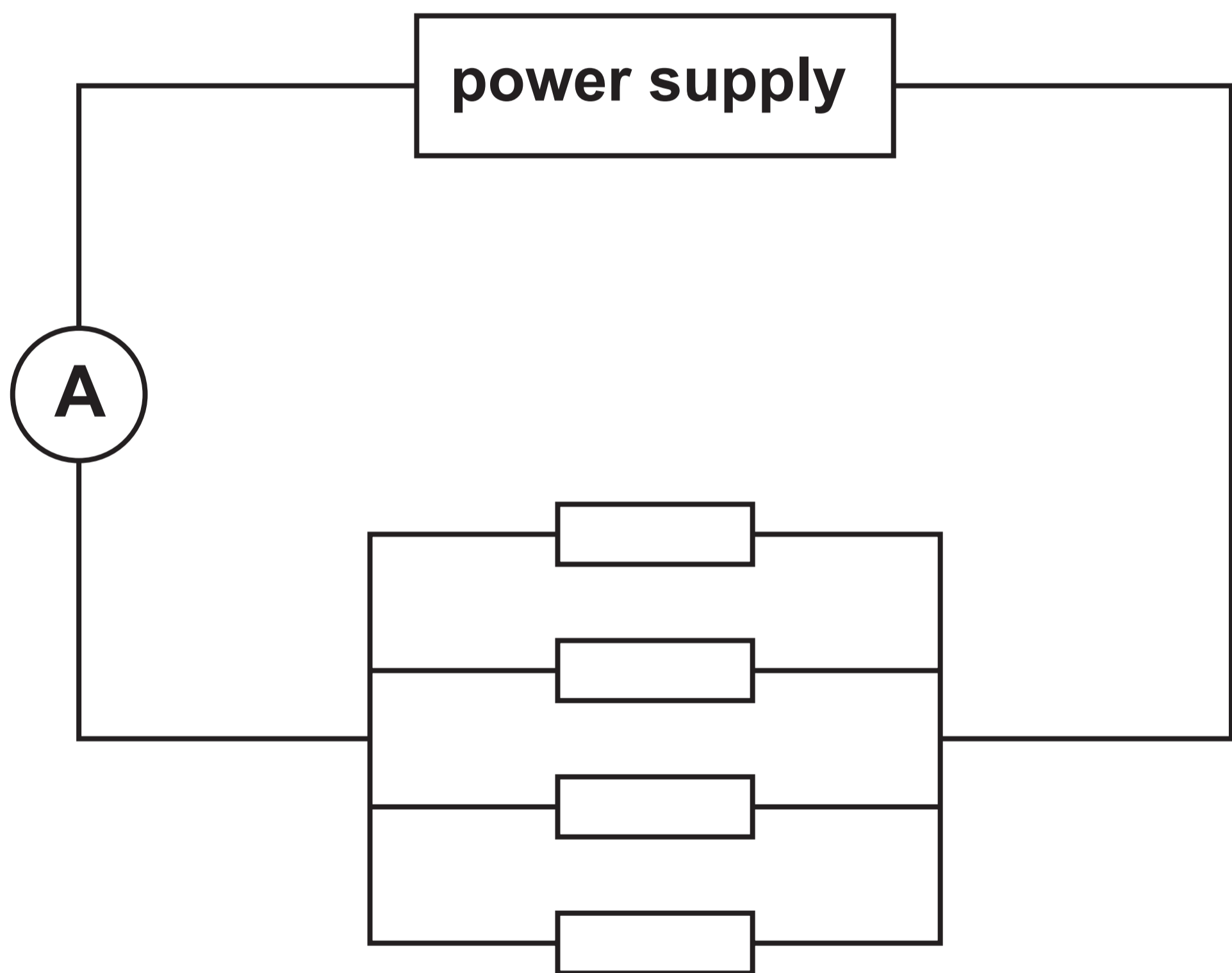


FIGURE 20



Question 8(b)

FIGURE 21



Question 8(b)

FIGURE 22

| number of resistors | current in mA | voltage in V |
|---------------------|---------------|--------------|
| 4 | | 6·00 |
| 3 | 27·3 | 6·00 |
| 2 | 18·2 | 6·00 |
| 1 | 9·1 | 6·00 |

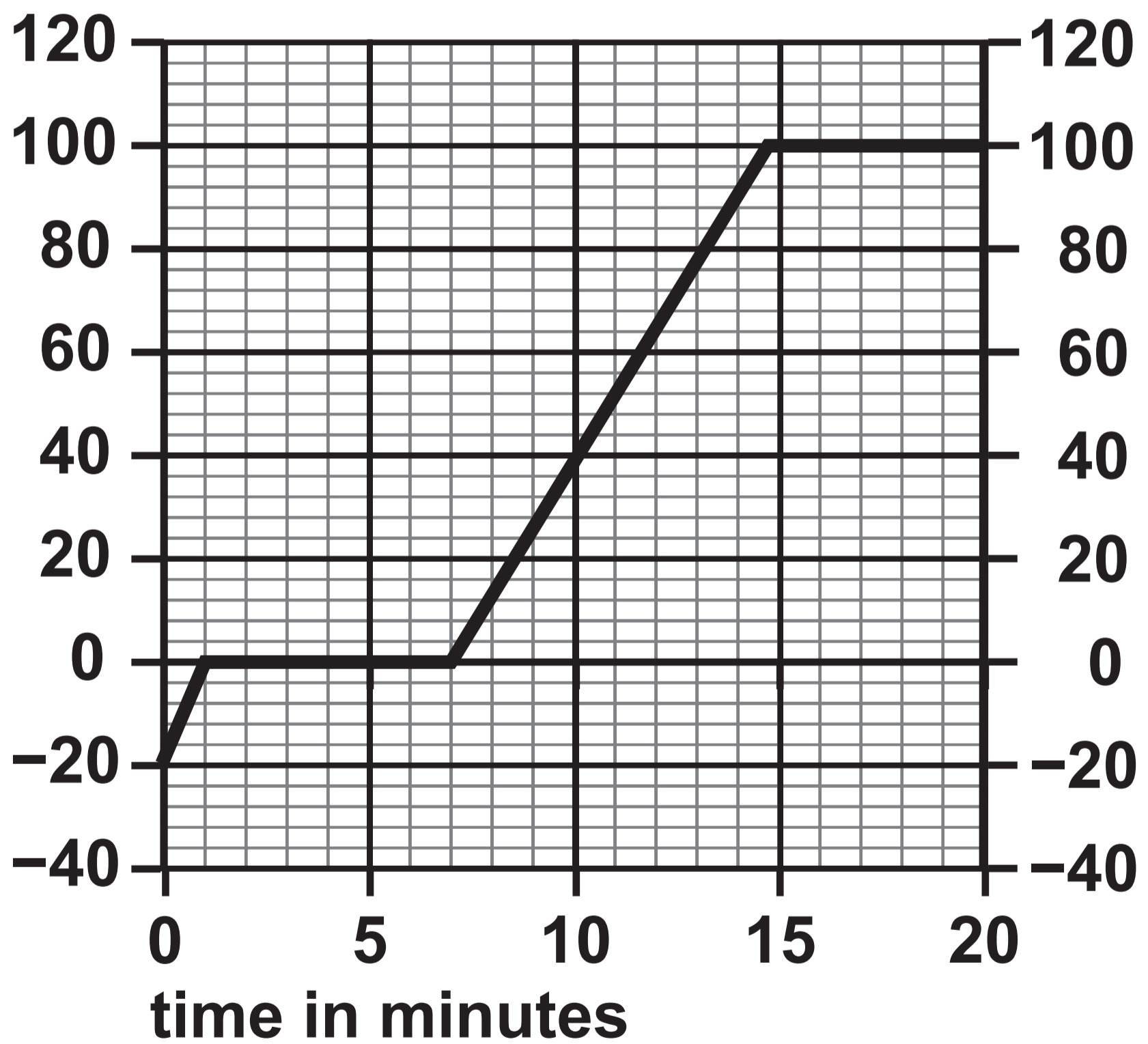
Question 9(b)

FIGURE 23

| | |
|---------------------|---------------------------------|
| | density in g/cm ³ |
| solid aluminium | 2.70 |
| liquid aluminium | 2.38 |

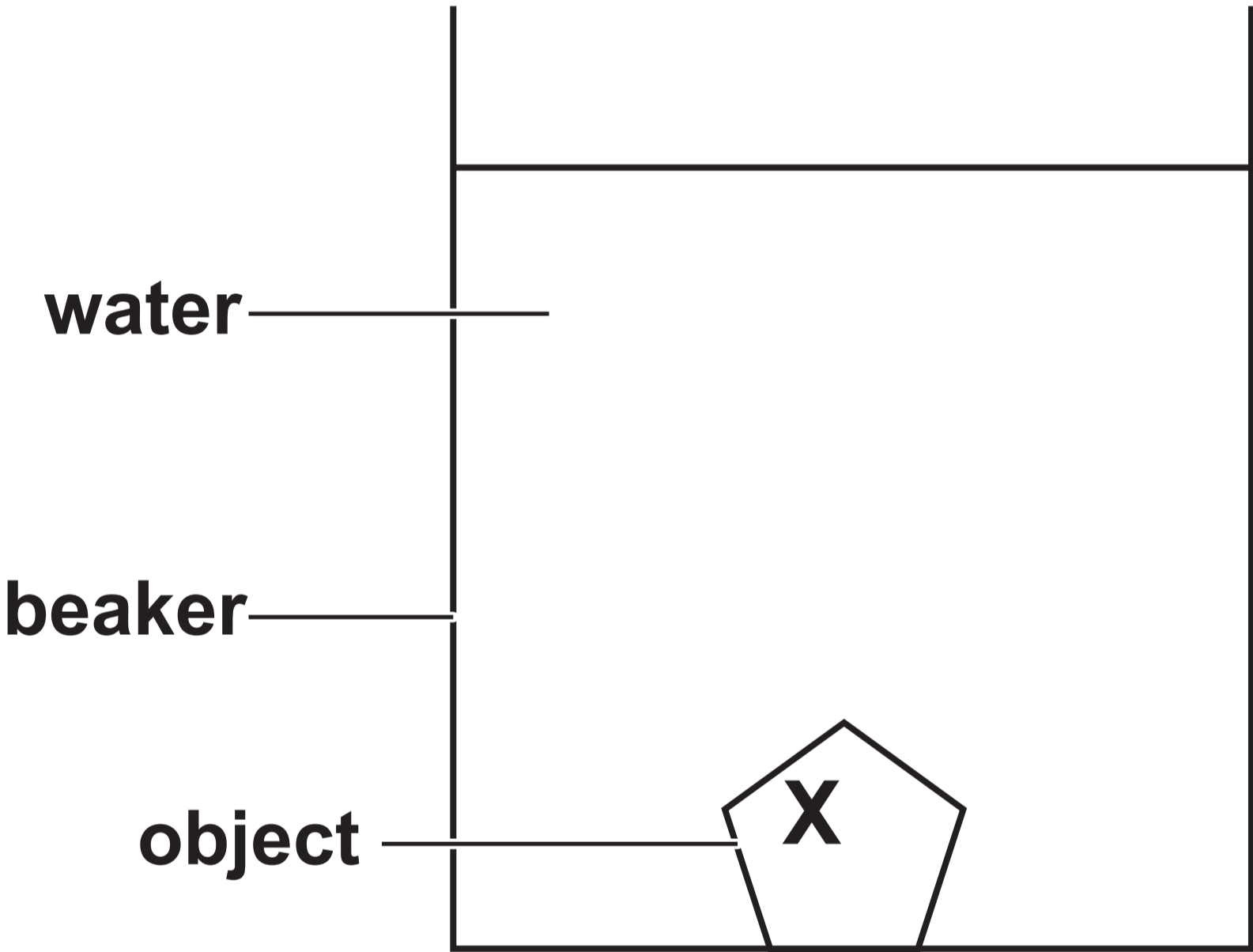
Question 9(d)

FIGURE 24

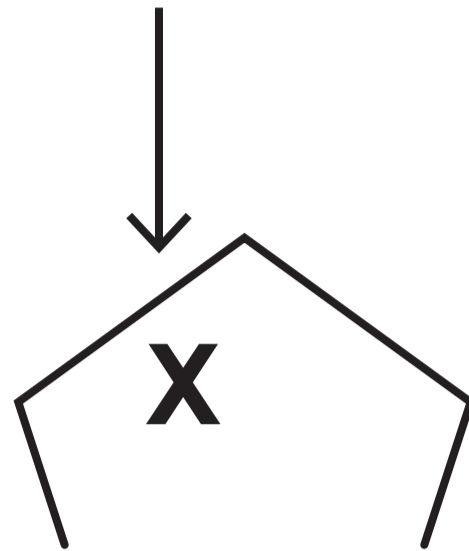
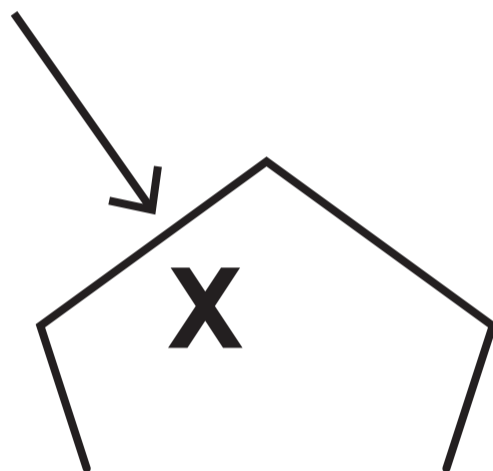
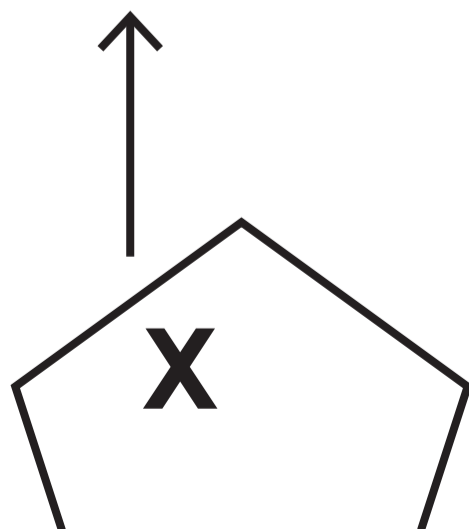
temperature in $^{\circ}\text{C}$ 

Question 10(a)

FIGURE 25

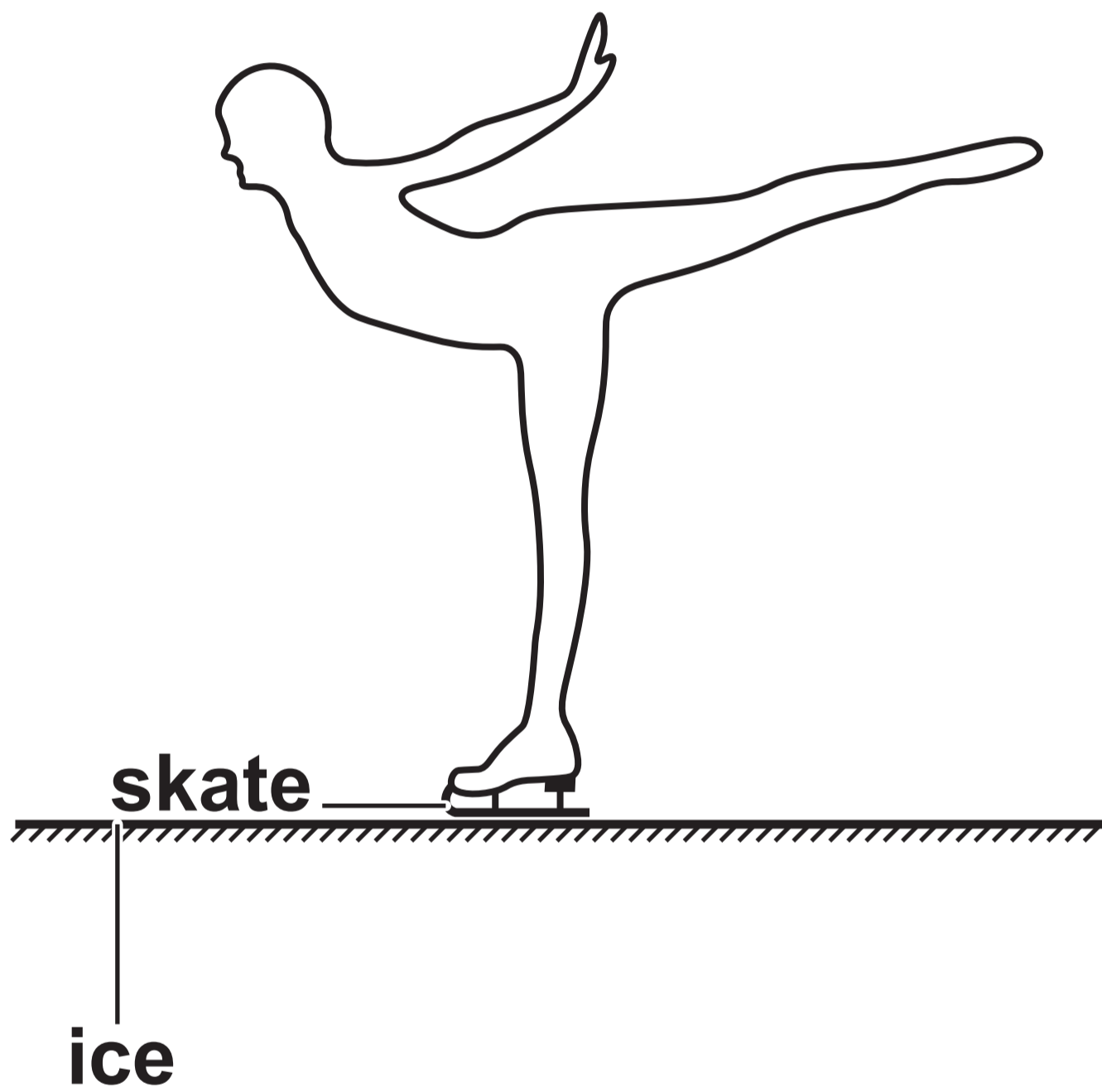


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Question 10(a) continued.**diagram A****diagram B****diagram C****diagram D**

Question 10(b)

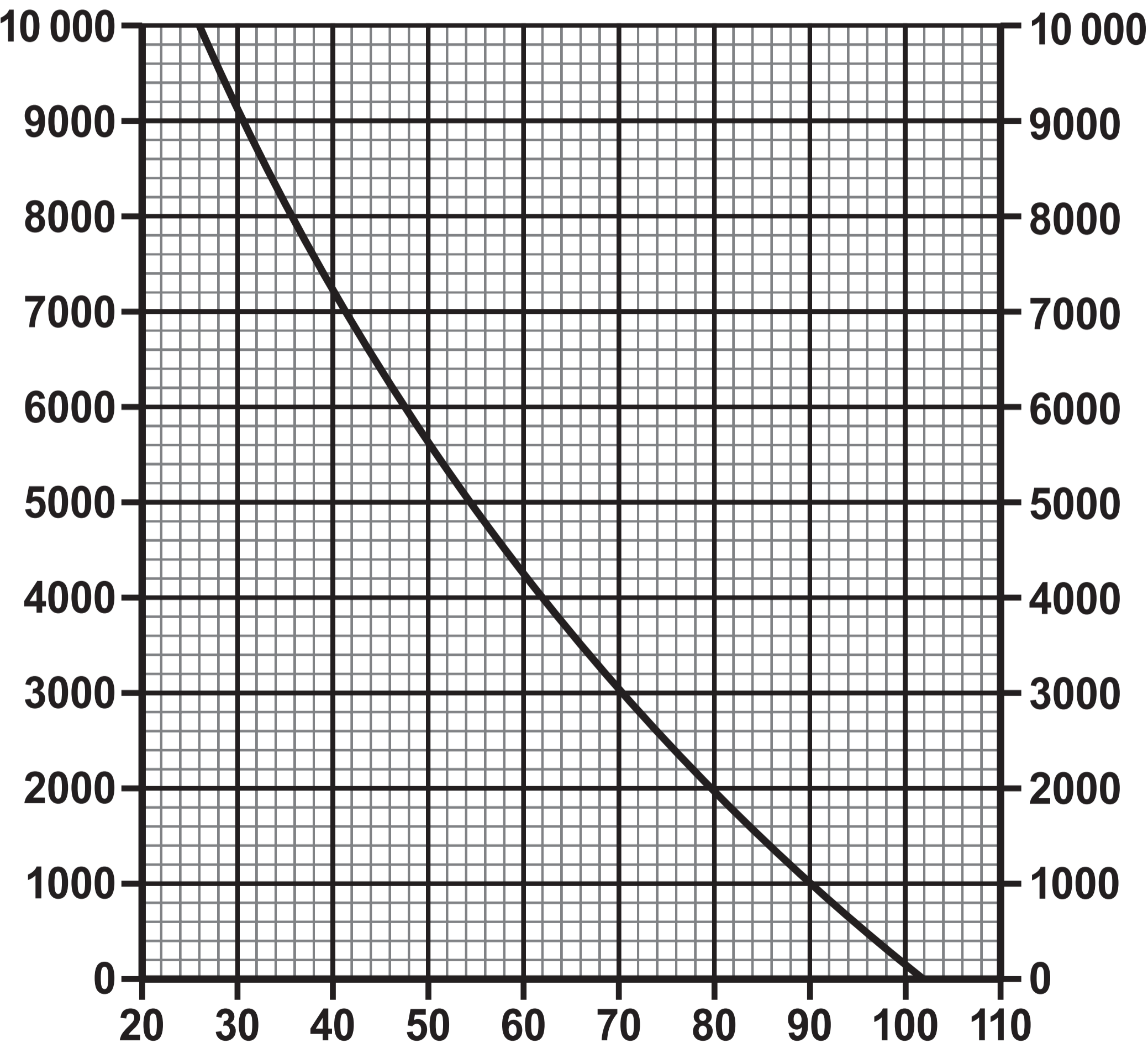
FIGURE 26



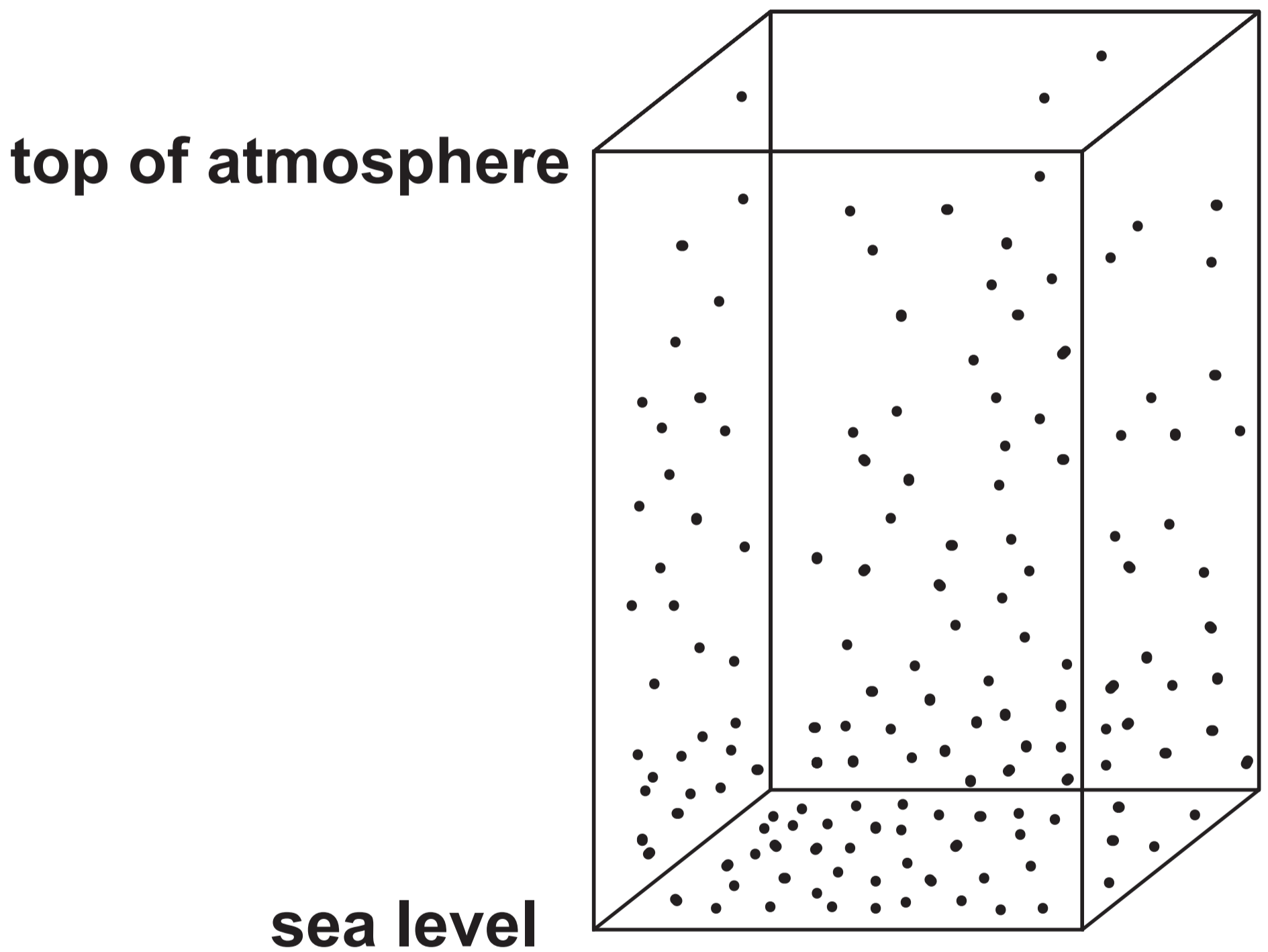
Question 10(c)

FIGURE 27

height in m

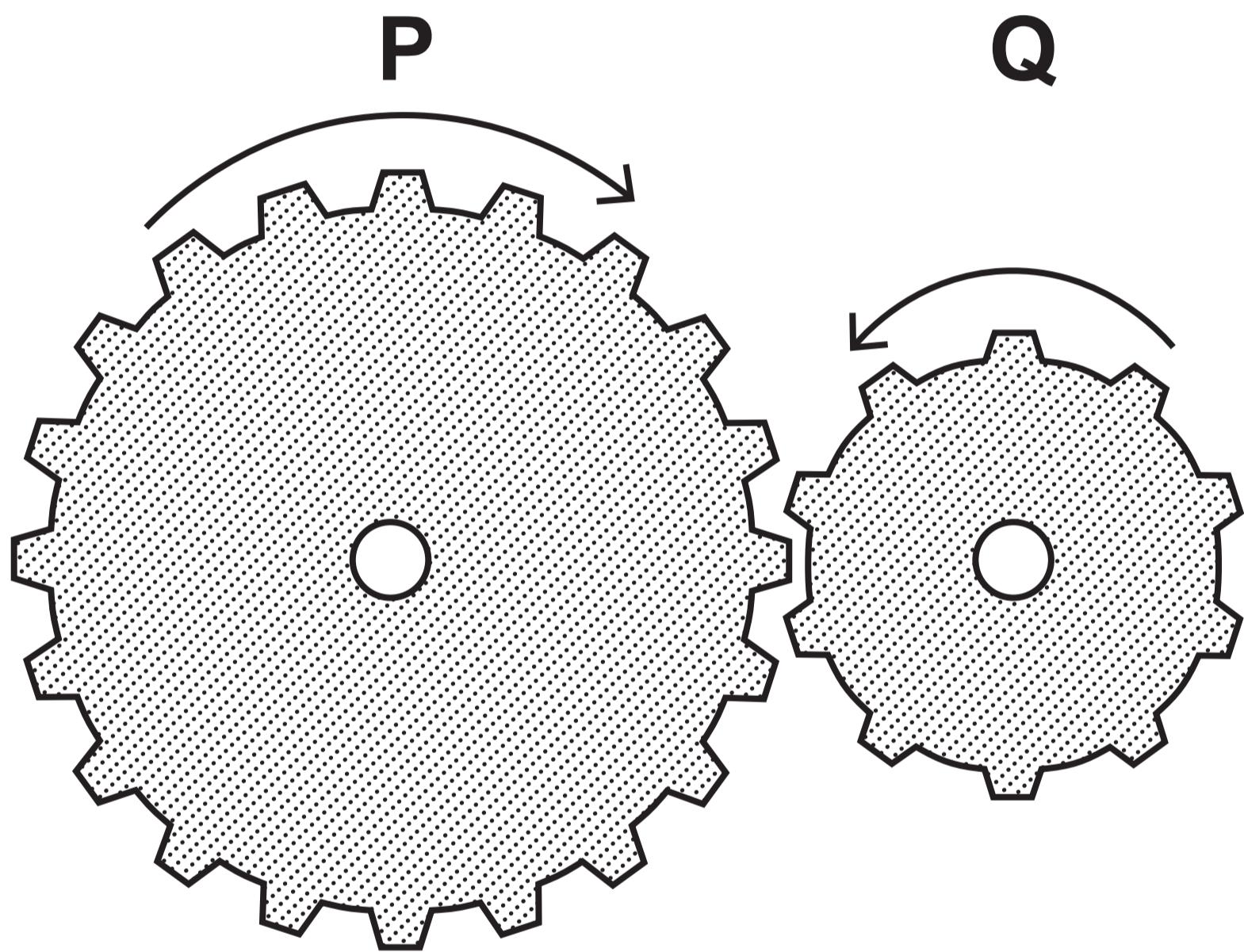


pressure in kPa

Question 10(d)**FIGURE 28**

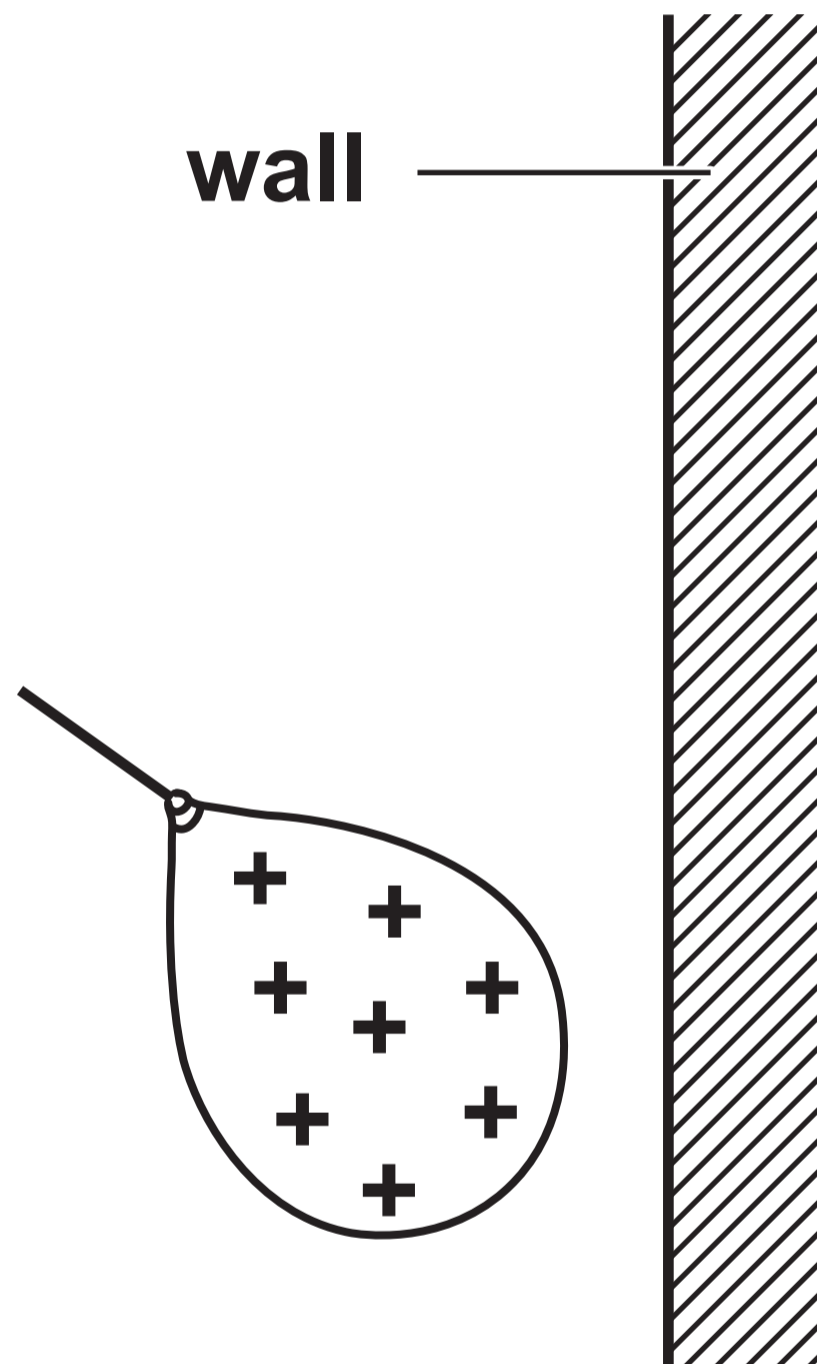
Question 2(a)

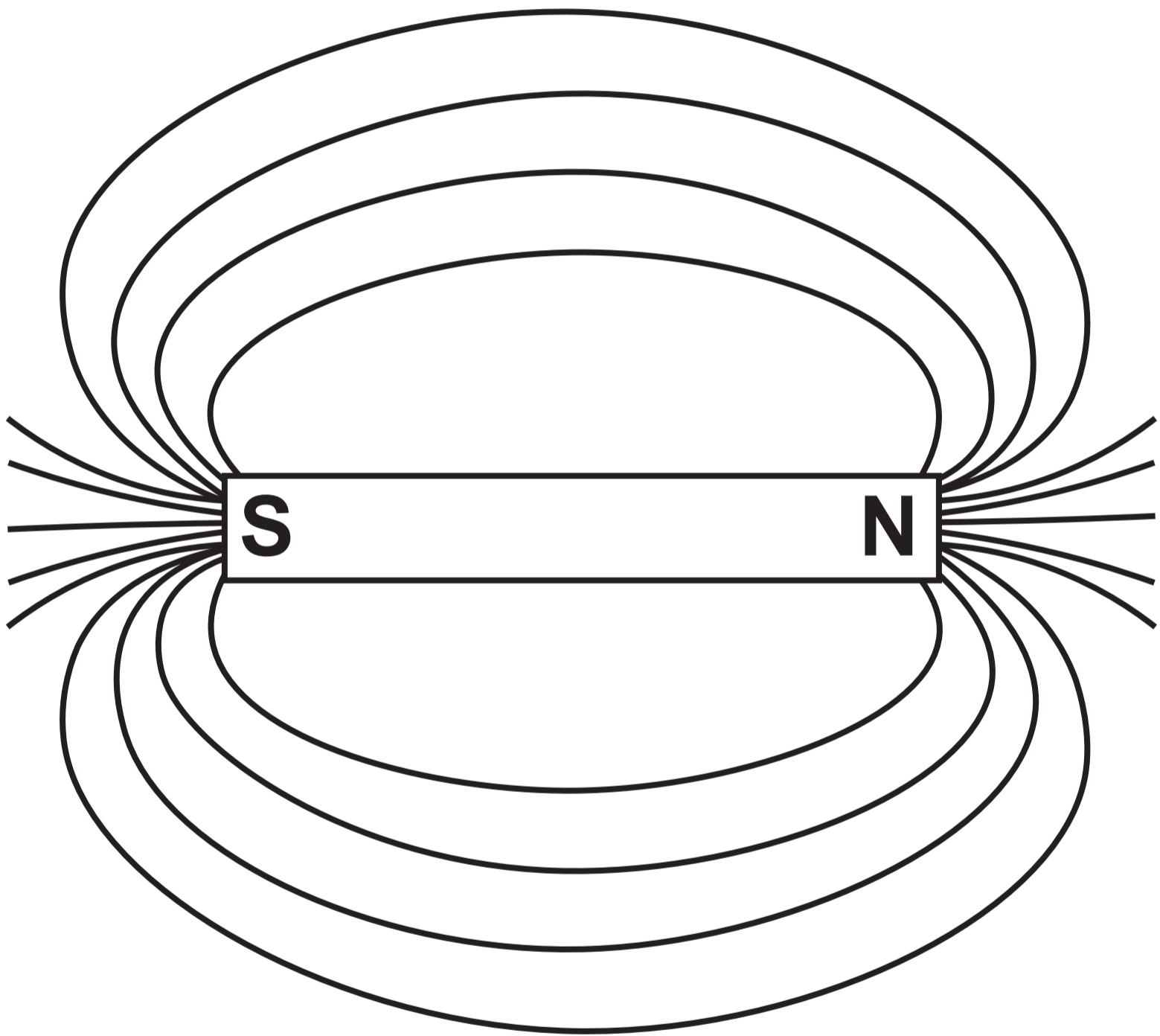
FIGURE 2



Question 3(b)

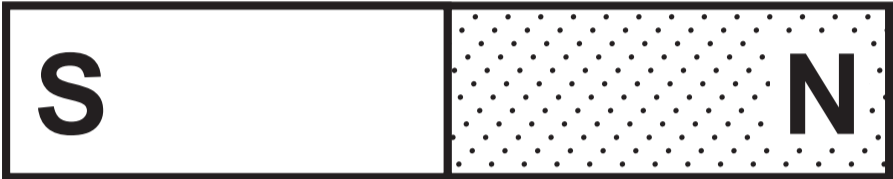
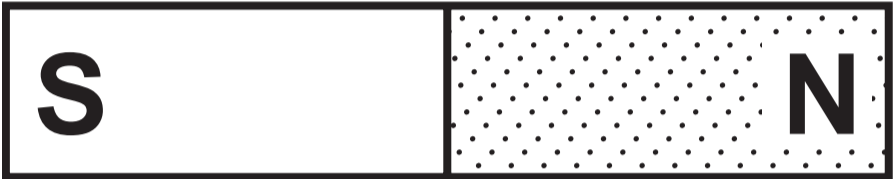
FIGURE 6



Question 4(a)**FIGURE 8**

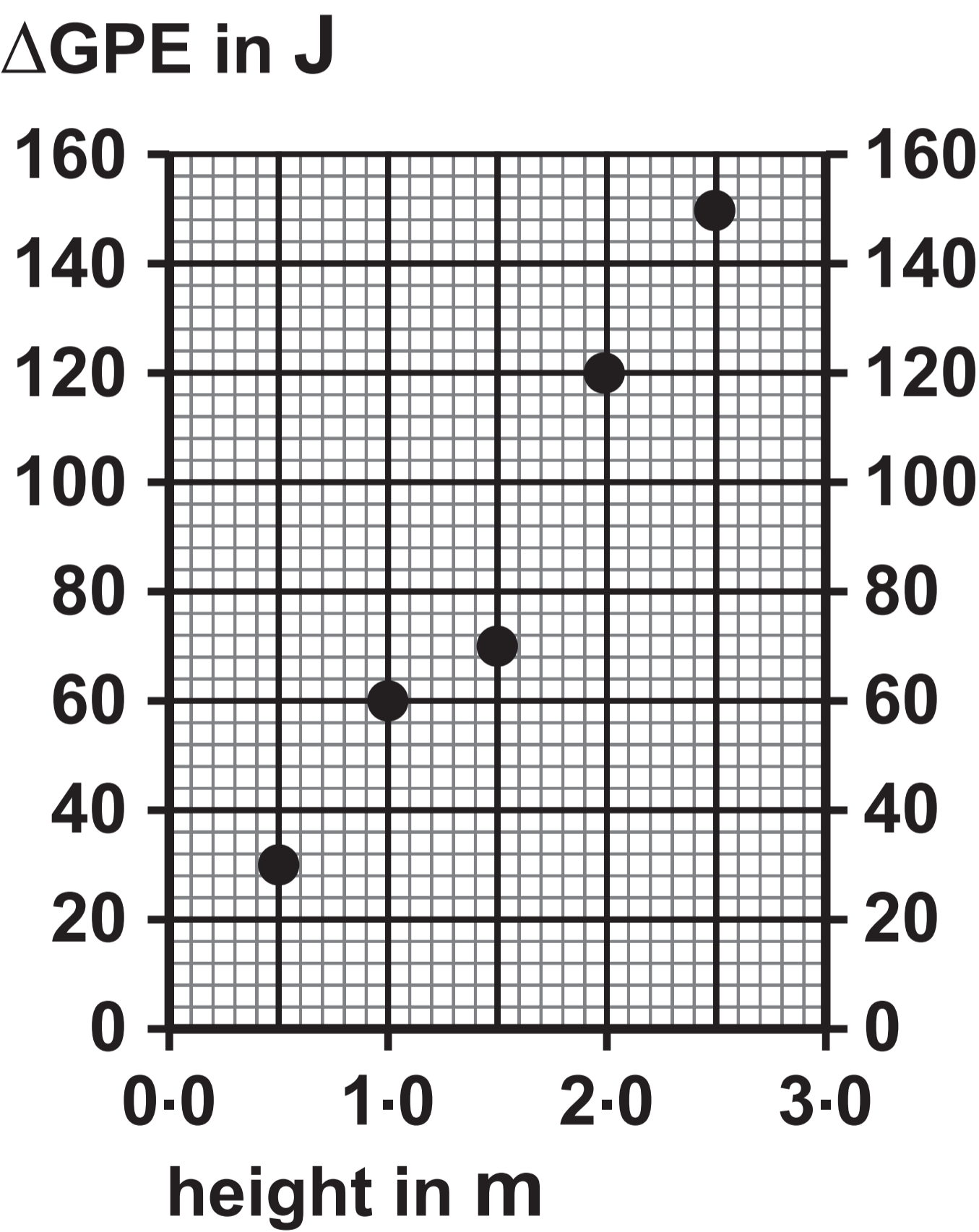
Question 4(b)

FIGURE 9



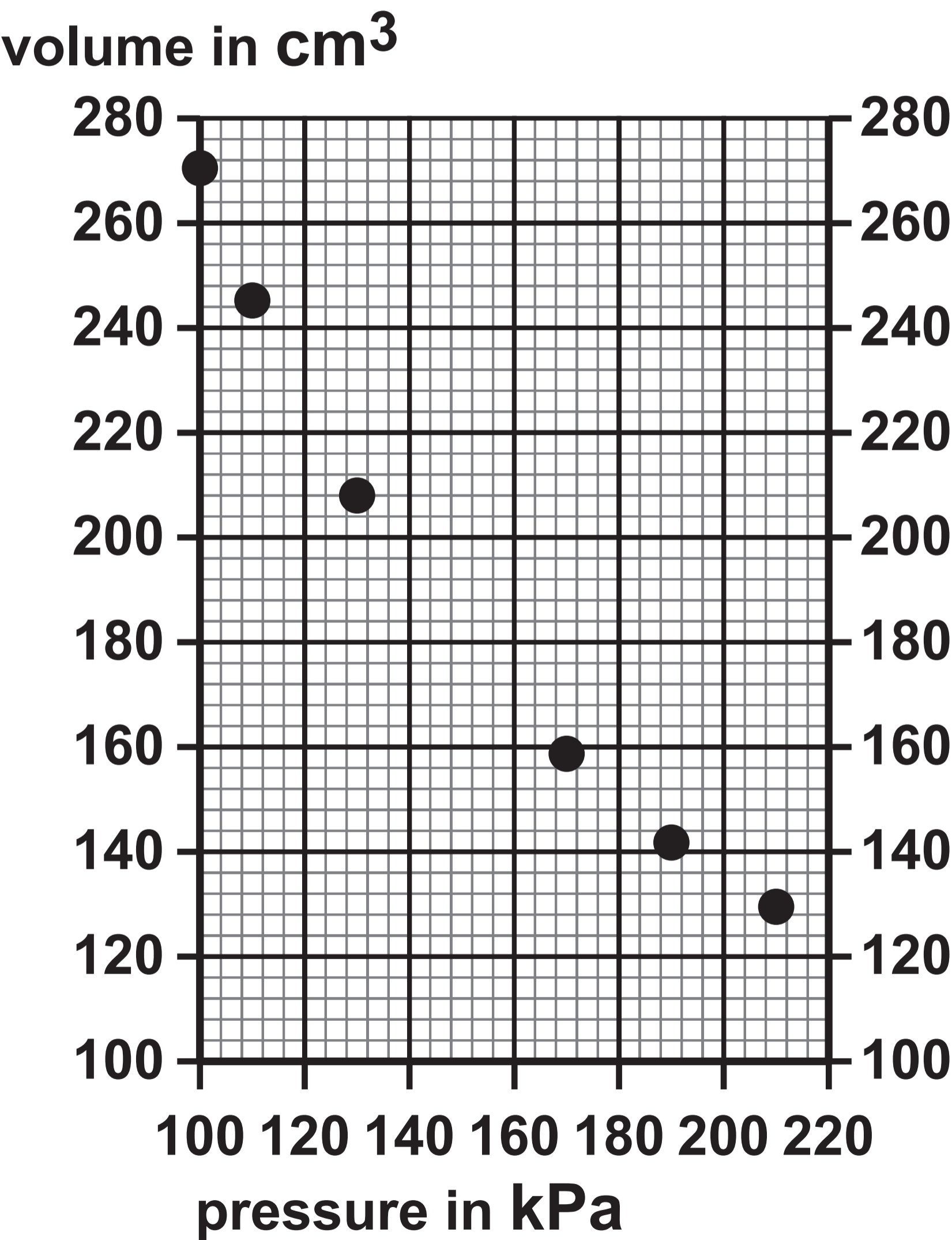
Question 5(c)

FIGURE 13



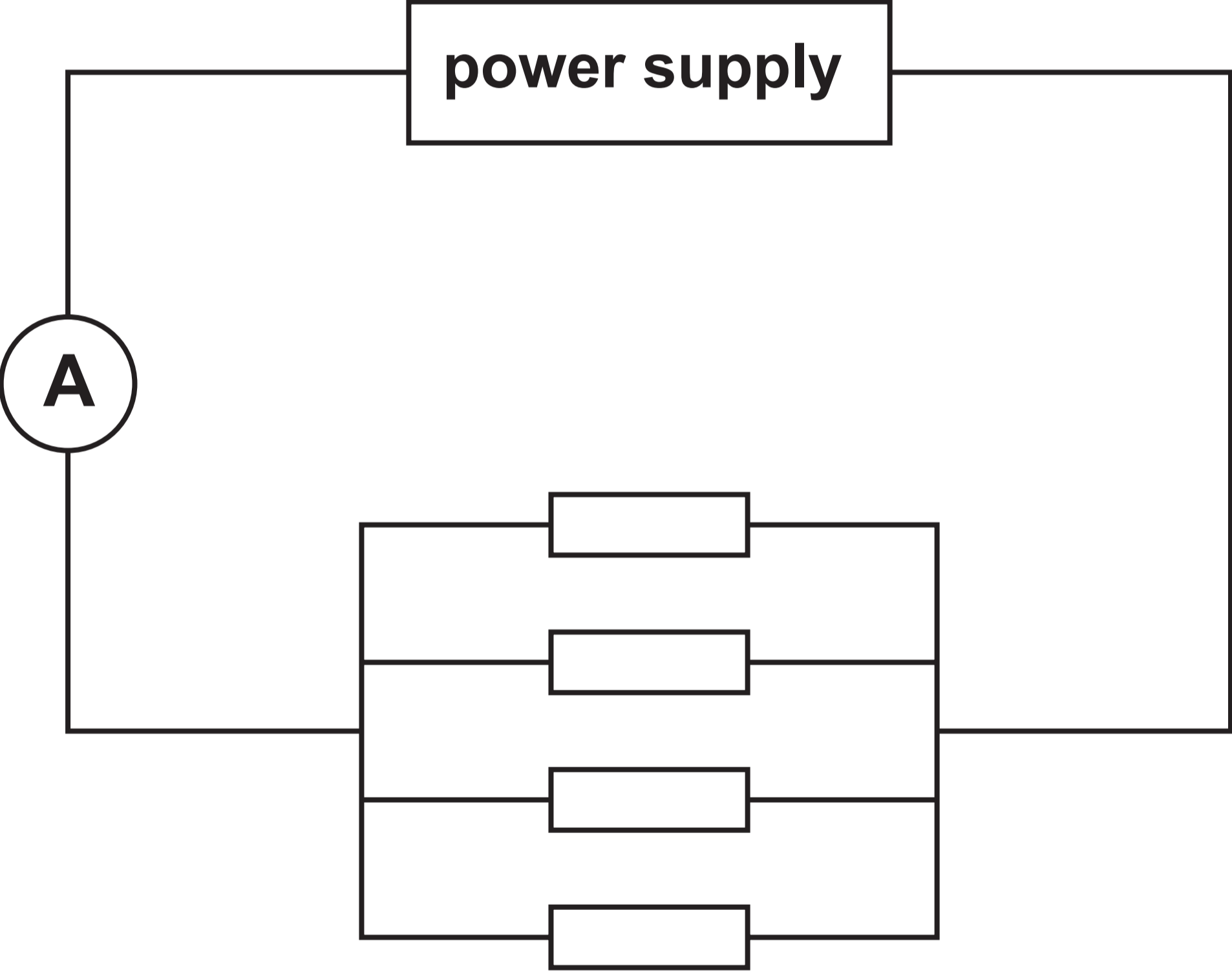
Question 7(a)

FIGURE 17



Question 8(b)

FIGURE 21



Question 6

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