

# TOPICAL PAST PAPERS

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## IGCSE Physics (0625) Paper 2

[Multiple Choice Questions | Extended]

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Exam Series: February/March 2017 – May/June 2025

Format Type A:

Answers to all questions are provided as an appendix



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# Introduction

Each Topical Past Paper Questions Compilation contains a comprehensive collection of hundreds of questions and corresponding answer schemes, presented in worksheet format. The questions are carefully arranged according to their respective chapters and topics, which align with the latest IGCSE or AS/A Level subject content. Here are the key features of these resources:

1. The workbook covers a wide range of topics, which are organized according to the latest syllabus content for Cambridge IGCSE or AS/A Level exams.
2. Each topic includes numerous questions, allowing students to practice and reinforce their understanding of key concepts and skills.
3. The questions are accompanied by detailed answer schemes, which provide clear explanations and guidance for students to improve their performance.
4. The workbook's format is user-friendly, with worksheets that are easy to read and navigate.
5. This workbook is an ideal resource for students who want to familiarize themselves with the types of questions that may appear in their exams and to develop their problem-solving and analytical skills.

Overall, Topical Past Paper Questions Workbooks are a valuable tool for students preparing for IGCSE or AS/A level exams, providing them with the opportunity to practice and refine their knowledge and skills in a structured and comprehensive manner. To provide a clearer description of this book's specifications, here are some key details:

- Title: Cambridge IGCSE Physics (0625) Paper 2 Topical Past Papers
- Subtitle: Exam Practice Worksheets With Answer Scheme
- Examination board: Cambridge Assessment International Education (CAIE)
- Subject code: 0625
- Years covered: February/March 2017 – May/June 2025
- Paper: 2
- Number of pages: 1021
- Number of questions: 2160



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# Chapter 1

## Motion, forces and energy

### 1.1 Physical quantities and measurement techniques

1. 0625\_s25\_qp\_22 Q: 1

Which instrument is most suitable to determine the volume of a small irregularly shaped stone?

- A** 30 cm ruler
- B** digital timer
- C** measuring cylinder
- D** tape measure

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2. 0625\_s25\_qp\_23 Q: 1

Which quantity can be measured using a ruler?

- A** the distance travelled by a toy train in one second
- B** the temperature of a toy train
- C** the time taken for a toy train to travel one metre
- D** the volume of a toy train

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3. 0625\_m24\_qp\_22 Q: 1

A student has a measuring cylinder containing water and also has a balance.

Which of these could she use to find the volume of a small metal sphere?

She has no other apparatus.

- A** either the measuring cylinder containing water or the balance
- B** the measuring cylinder containing water only
- C** the balance only
- D** neither the measuring cylinder nor the balance

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4. 0625\_m24\_qp\_22 Q: 4

Which row contains one scalar quantity and one vector quantity?

	quantity 1	quantity 2
<b>A</b>	energy	velocity
<b>B</b>	mass	time
<b>C</b>	momentum	weight
<b>D</b>	distance	temperature

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5. 0625\_s24\_qp\_21 Q: 1

In which row are quantities correctly categorised into scalar quantities and vector quantities?

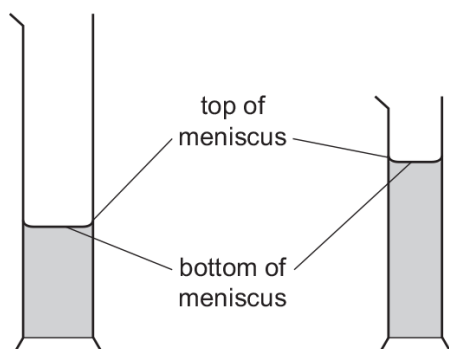
	scalar quantities	vector quantities
<b>A</b>	mass and energy	weight and acceleration
<b>B</b>	gravitational field strength and time	force and electric field strength
<b>C</b>	speed and momentum	distance and force
<b>D</b>	distance and energy	velocity and temperature

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6. 0625\_s24\_qp\_22 Q: 1

A student wishes to measure accurately the volume of approximately  $40\text{ cm}^3$  of water. She has two measuring cylinders, a larger one that can hold  $100\text{ cm}^3$ , and a smaller one that can hold  $50\text{ cm}^3$ . The water forms a meniscus where it touches the glass.



Which cylinder and which water level does the student use to ensure an accurate result?

	cylinder	water level
<b>A</b>	larger one	bottom of meniscus
<b>B</b>	larger one	top of meniscus
<b>C</b>	smaller one	bottom of meniscus
<b>D</b>	smaller one	top of meniscus

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7. 0625\_s24\_qp\_23 Q: 1

A student measures the volume of a small, irregularly shaped stone.

Which apparatus must be used?

- A** a ruler and a measuring cylinder containing water
- B** a measuring cylinder containing water only
- C** a ruler and an empty measuring cylinder
- D** a ruler only

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8. 0625\_s24\_qp\_23 Q: 2

Which quantity is a vector?

- A** electric field strength
- B** energy
- C** mass
- D** temperature

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9. 0625\_w24\_qp\_21 Q: 1

A student uses a metre ruler to measure the length of a sheet of paper.

Which measurement is shown to the nearest millimetre?

- A** 0.2932m
- B** 0.293m
- C** 0.29m
- D** 0.3m

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10. 0625\_w24\_qp\_22 Q: 40

Which quantity is an estimate of the age of the Universe?

- A**  $H_0$
- B**  $d \times H_0$
- C**  $\frac{1}{H_0}$
- D**  $v \times H_0$

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11. 0625\_w24\_qp\_23 Q: 1

Which list contains only vector quantities?

- A** acceleration, distance, speed
- B** electric field strength, momentum, weight
- C** energy, mass, temperature
- D** force, time, velocity

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12. 0625\_w24\_qp\_23 Q: 3

An object of mass  $1.0\text{ kg}$  is at rest on the Earth. An identical object is at rest on a planet with a gravitational field strength of twice that on the Earth.

Which row correctly compares the object on the planet to the object on the Earth?

	its weight	its acceleration when the same horizontal resultant force is applied
<b>A</b>	double	equal to that on the Earth
<b>B</b>	double	half that on the Earth
<b>C</b>	half	equal to that on the Earth
<b>D</b>	half	half that on the Earth

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13. 0625\_m23\_qp\_22 Q: 1

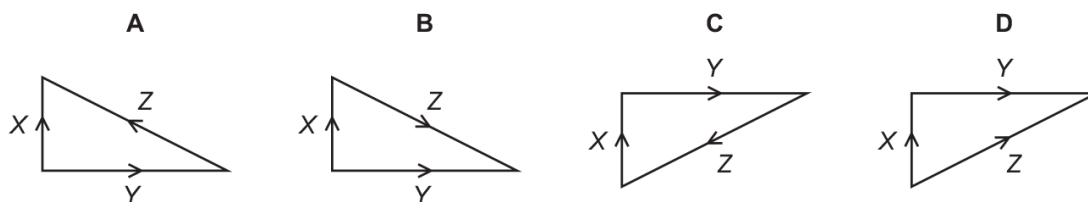
Which list contains two scalar quantities and two vector quantities?

- A** distance, speed, time, velocity
- B** force, velocity, distance, mass
- C** mass, energy, temperature, momentum
- D** weight, acceleration, momentum, speed

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14. 0625\_s23\_qp\_21 Q: 1

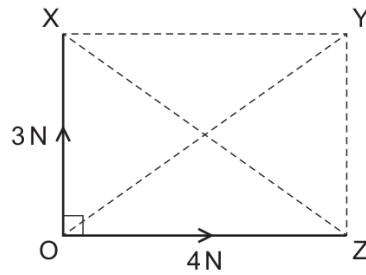
Which vector diagram correctly shows the force  $Z$  as the resultant of forces  $X$  and  $Y$ ?



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15. 0625\_s23\_qp\_22 Q: 1

Forces of 3 N and 4 N act at right angles, as shown.



What is the resultant force?

- A 1 N along XZ
- B 5 N along XZ
- C 5 N along OY
- D 7 N along OY

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16. 0625\_w23\_qp\_21 Q: 1

Which is a vector quantity?

- A density
- B mass
- C pressure
- D weight

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17. 0625\_w23\_qp\_22 Q: 1

Which quantity is a scalar quantity?

- A acceleration
- B force
- C time
- D velocity

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18. 0625\_w23\_qp\_22 Q: 2

A student measures the average speed of a cyclist in a race.

Which quantities must she measure?

- A** the total time taken to complete the race and the time taken for the cyclist to reach her highest speed
- B** the total time taken to complete the race and the total distance travelled by the cyclist at her highest speed
- C** the total time taken to complete the race and the total distance travelled by the cyclist
- D** the time taken to reach her highest speed and the total distance travelled by the cyclist

\_\_\_\_\_ compiled by [examinent.com](http://examinent.com) \_\_\_\_\_

19. 0625\_w23\_qp\_23 Q: 1

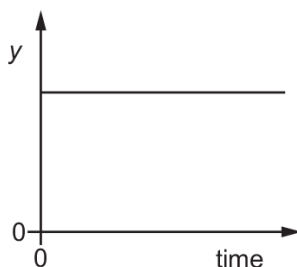
How many of the quantities shown are scalars?

- |          | mass | momentum | density | energy   |   |          |   |
|----------|------|----------|---------|----------|---|----------|---|
| <b>A</b> | 1    | <b>B</b> | 2       | <b>C</b> | 3 | <b>D</b> | 4 |

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20. 0625\_w23\_qp\_23 Q: 2

A train is on a straight track. The graph shows how a quantity  $y$  varies with time.



Which statements can be true?

- 1 The train is stationary and  $y$  represents the distance from the last station.
  - 2 The train is moving and  $y$  represents the distance from the last station.
  - 3 The train is stationary and  $y$  represents the speed of the train.
  - 4 The train is moving and  $y$  represents the speed of the train.
- A** 1 and 2      **B** 1 and 4      **C** 2 and 3      **D** 3 and 4

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21. 0625\_m22\_qp\_22 Q: 1

A student investigates a pendulum.

He measures the time for the pendulum to complete 20 oscillations.

He repeats the experiment three more times.

The readings are shown.

experiment	time for 20 oscillations / s
1	17.6
2	19.8
3	17.6
4	18.6

What is the average period of the pendulum?

- A** 0.88 s      **B** 0.92 s      **C** 17.6 s      **D** 18.4 s

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22. 0625\_m22\_qp\_22 Q: 14

An object is at rest on a horizontal surface.

Which equation is used to calculate the pressure that the object exerts?

- A**  $\frac{\text{mass of the object}}{\text{area of contact}}$   
**B**  $\frac{\text{weight of the object}}{\text{area of contact}}$   
**C** mass of the object  $\times$  area of contact  
**D** weight of the object  $\times$  area of contact

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23. 0625\_s22\_qp\_21 Q: 1

Which measuring devices are most suitable for determining the length of a swimming pool and the thickness of aluminium foil?

	length of a swimming pool	thickness of aluminium foil
<b>A</b>	ruler	measuring cylinder
<b>B</b>	tape measure	micrometer screw gauge
<b>C</b>	tape measure	ruler
<b>D</b>	ruler	micrometer screw gauge

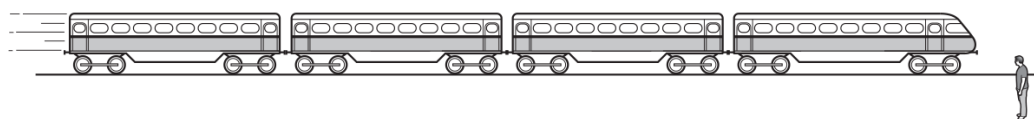
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24. 0625\_s22\_qp\_22 Q: 1

Very small values of which quantity are measured using a micrometer screw gauge?

- A** time
- B** pressure
- C** moment
- D** distance

A man stands next to a railway track.



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25. 0625\_s22\_qp\_23 Q: 1

What is a micrometer screw gauge used to measure?

- A** very small currents
- B** very small distances
- C** very small forces
- D** very small pressures

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26. 0625\_w22\_qp\_21 Q: 1

Which measuring instrument is used to measure the diameter of a thin metal wire?

- A** 30 cm rule
- B** measuring tape
- C** metre rule
- D** micrometre screw gauge

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27. 0625\_w22\_qp\_22 Q: 1

Which measuring devices are most suitable to determine the volume of about 200 ml of liquid and the diameter of a thin wire?

	volume of about 200 ml of liquid	diameter of a thin wire
<b>A</b>	measuring cylinder	micrometer screw gauge
<b>B</b>	measuring cylinder	ruler
<b>C</b>	ruler	measuring cylinder
<b>D</b>	ruler	micrometer screw gauge

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28. 0625\_w22\_qp\_23 Q: 1

A wire is approximately 48 cm long and has an approximate diameter of 0.3 mm.

Which measuring instruments can be used to obtain more precise values of the dimensions of the wire?

	length of the wire	diameter of the wire
<b>A</b>	30 cm ruler	micrometer
<b>B</b>	half-metre rule	30 cm rule
<b>C</b>	half-metre rule	micrometer
<b>D</b>	micrometer	half-metre rule

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29. 0625\_m21\_qp\_22 Q: 1

A student has a measuring cylinder containing water and also has a balance.

Which of these could she use to find the volume of a small metal sphere?

She has no other apparatus.

- A** either the measuring cylinder containing water or the balance
- B** the measuring cylinder containing water only
- C** the balance only
- D** neither the measuring cylinder nor the balance

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30. 0625\_s21\_qp\_21 Q: 1

The diagram shows a stone of irregular shape.



Which property of the stone can be found by lowering it into a measuring cylinder half-filled with water?

- A** length
- B** mass
- C** volume
- D** weight

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31. 0625\_s21\_qp\_22 Q: 1

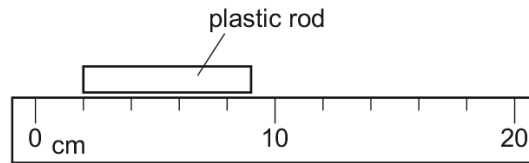
Which piece of apparatus is the most suitable for measuring the mass of a pencil sharpener?

- A** digital balance
- B** measuring cylinder
- C** newton meter
- D** ruler

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32. 0625\_s21\_qp\_23 Q: 1

The diagram shows a plastic rod alongside a ruler.



What is the length of the rod?

- A** 2.5 cm      **B** 3.5 cm      **C** 7.0 cm      **D** 9.0 cm

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33. 0625\_w21\_qp\_21 Q: 1

Which instrument is most suitable for measuring the thickness of a single sheet of paper?

- A** 15 cm rule  
**B** balance  
**C** metre rule  
**D** micrometer screw gauge

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34. 0625\_w21\_qp\_22 Q: 1

A student is taking some measurements.

Which measurement is taken directly using a micrometer screw gauge?

- A** 0.52 g/mm<sup>2</sup>      **B** 0.52 g/mm<sup>3</sup>      **C** 0.52 mm      **D** 0.52 mm<sup>2</sup>

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35. 0625\_w21\_qp\_23 Q: 1

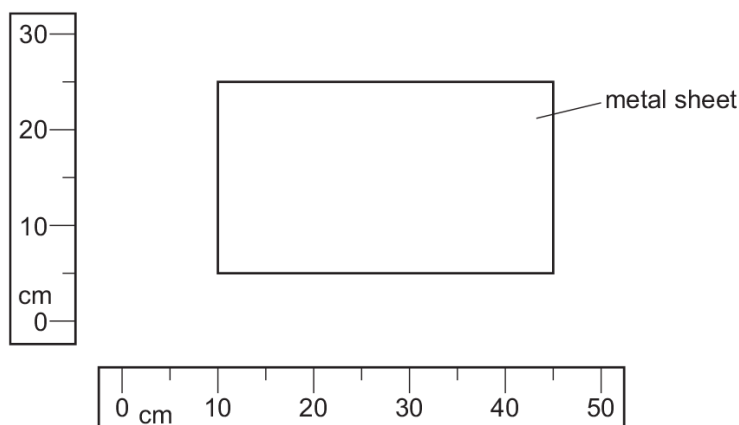
For which purpose is a micrometer screw gauge suitable?

- A** measuring the current in a coil that is known to be about  $3 \times 10^{-6}$  A  
**B** measuring the diameter of a ball bearing that is known to be about  $3 \times 10^{-3}$  m  
**C** measuring the mass of a grain of sand that is known to be about  $3 \times 10^{-3}$  g  
**D** measuring the moment used to turn a screw that is known to be about  $3 \times 10^{-6}$  N m

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36. 0625\_m20\_qp\_22 Q: 1

The diagram shows a rectangular metal sheet close to two rulers.



What is the area of the metal sheet?

- A** 700 cm<sup>2</sup>      **B** 875 cm<sup>2</sup>      **C** 900 cm<sup>2</sup>      **D** 1125 cm<sup>2</sup>

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37. 0625\_s20\_qp\_21 Q: 1

A pendulum makes 50 complete swings in 2 min 40 s.

What is the time period for 1 complete swing?

- A** 1.6 s      **B** 3.2 s      **C** 4.8 s      **D** 6.4 s

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38. 0625\_s20\_qp\_22 Q: 1

Five athletes P, Q, R, S and T compete in a race. The table shows the finishing times for the athletes.

athlete	P	Q	R	S	T
finishing time / s	22.50	24.40	25.20	26.50	23.20

Which statement is correct?

- A** Athlete P won the race and was 0.70 s ahead of the athlete in second place.  
**B** Athlete P won the race and was 1.90 s ahead of the athlete in second place.  
**C** Athlete S won the race and was 1.30 s ahead of the athlete in second place.  
**D** Athlete S won the race and was 2.10 s ahead of the athlete in second place.

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39. 0625\_s20\_qp\_23 Q: 1

Diagram 1 shows a solid, rectangular-sided block.

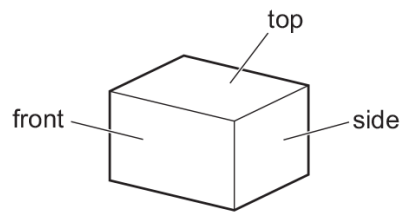


diagram 1

Diagram 2 shows the same block from the front and from the side.

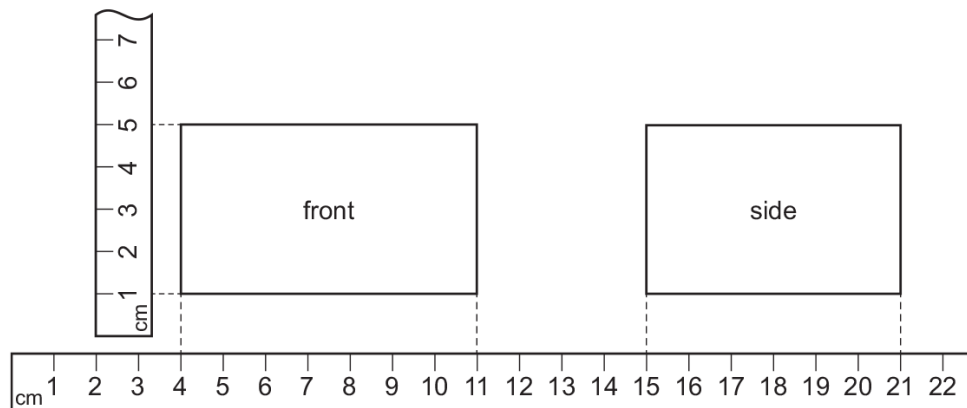


diagram 2

Metre rules have been shown close to the edges of the block.

What is the volume of the block?

- A**  $120 \text{ cm}^3$       **B**  $168 \text{ cm}^3$       **C**  $264 \text{ cm}^3$       **D**  $1155 \text{ cm}^3$

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40. 0625\_w20\_qp\_21 Q: 1

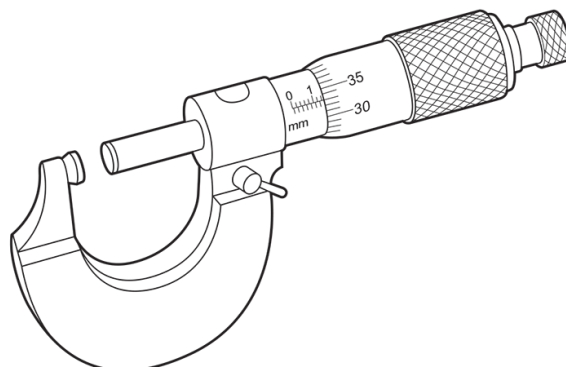
For which one of the following measurements would a micrometer screw gauge be most suitable?

- A** length of this page  
**B** length of a pencil  
**C** diameter of a wire  
**D** diameter of an atom

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41. 0625\_w20\_qp\_22 Q: 1

The diagram shows a measuring device.



For which measurement is this device suitable?

- A** diameter of a cylinder of aluminium of about 20 cm
- B** distance between two molecules of zinc
- C** length of a rod of iron of about 1 m
- D** thickness of a sheet of copper of about 1.5 mm

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42. 0625\_w20\_qp\_23 Q: 1

A micrometer screw gauge reads 0.02 mm when the jaws are fully closed. It reads 0.56 mm when measuring the diameter of a metal wire.

What is the diameter of the wire?

- A** 0.36 mm      **B** 0.54 mm      **C** 0.56 mm      **D** 0.58 mm

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43. 0625\_m19\_qp\_22 Q: 1

Which row shows the best choice of measuring instruments to obtain accurate values for the distances shown?

	diameter of wire	height of bench	length of laboratory
<b>A</b>	measuring tape	measuring tape	micrometer screw gauge
<b>B</b>	metre rule	micrometer screw gauge	measuring tape
<b>C</b>	micrometer screw gauge	measuring tape	metre rule
<b>D</b>	micrometer screw gauge	metre rule	measuring tape

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44. 0625\_s19\_qp\_21 Q: 1

Which quantity can be measured directly using a micrometer screw gauge?

- A** the area of a sheet of paper
- B** the mass of a sheet of paper
- C** the thickness of a sheet of paper
- D** the volume of a sheet of paper

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45. 0625\_w19\_qp\_21 Q: 1

A student measures the diameter of a pencil.

Which measuring instrument will give the most precise reading?

- A** a measuring tape
- B** a metre rule
- C** a micrometer screw gauge
- D** a ruler

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46. 0625\_w19\_qp\_22 Q: 1

A student measures the dimensions of a cylindrical glass beaker.

For which measurement should she use a micrometer screw gauge?

- A circumference of the beaker
- B diameter of the beaker
- C height of the beaker
- D thickness of the glass wall of the beaker

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47. 0625\_w19\_qp\_23 Q: 1

Which is the best apparatus to use to measure the thickness of a coin?

- A balance
- B ruler with a millimetre scale
- C micrometer screw gauge
- D pressure gauge

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48. 0625\_m18\_qp\_22 Q: 1

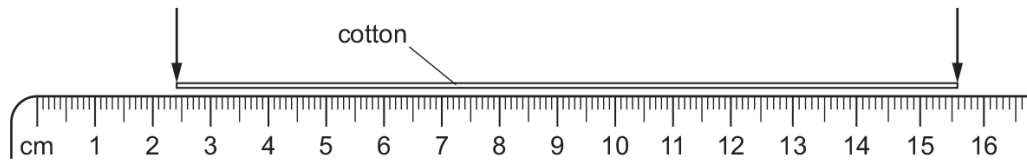
Which instrument is used to measure accurately the diameter of a thin metal wire?

- A 30 cm ruler
- B measuring tape
- C metre rule
- D micrometer screw gauge

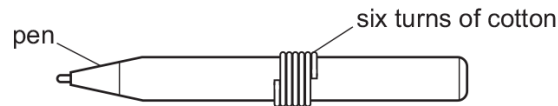
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49. 0625\_s18\_qp\_21 Q: 1

A length of cotton is measured between two points on a ruler.



When the length of cotton is wound closely around a pen, it goes round six times.



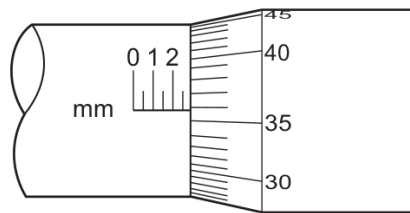
What is the distance once round the pen?

- A** 2.2 cm      **B** 2.6 cm      **C** 13.2 cm      **D** 15.6 cm

\_\_\_\_\_ compiled by [examinent.com](http://examinent.com) \_\_\_\_\_

50. 0625\_w18\_qp\_21 Q: 1

The diagram shows part of a micrometer screw gauge.



What is the smallest reading that can be achieved using this micrometer screw gauge?

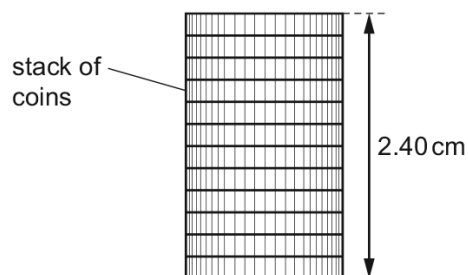
- A** 0.0001 mm      **B** 0.01 mm      **C** 0.1 mm      **D** 1 mm

\_\_\_\_\_ compiled by [examinent.com](http://examinent.com) \_\_\_\_\_



51. 0625\_m17\_qp\_22 Q: 1

The diagram shows the height of a stack of identical coins.



What is the thickness of one coin?

- A** 0.20 mm      **B** 2.0 mm      **C** 0.24 cm      **D** 2.0 cm

compiled by [examinent.com](http://examinent.com)

52. 0625\_s17\_qp\_21 Q: 1

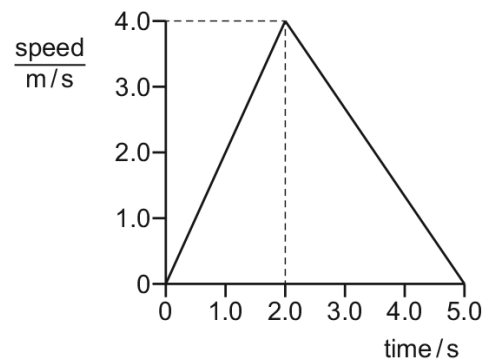
What is the most accurate and precise method to measure the thickness of a coin?

- A** Use a micrometer screw gauge.  
**B** Use a ruler and look at the scale perpendicularly.  
**C** Use a top pan balance.  
**D** Use the displacement method with water in a measuring cylinder.

compiled by [examinent.com](http://examinent.com)

53. 0625\_s17\_qp\_22 Q: 3

The diagram shows the speed-time graph for a toy car travelling in a straight line.



What is the acceleration of the car during the first two seconds and what is the total distance that it travels?

	<u>acceleration</u> $\text{m/s}^2$	total distance / m
<b>A</b>	0.50	10
<b>B</b>	0.50	20
<b>C</b>	2.0	10
<b>D</b>	2.0	20

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54. 0625\_s17\_qp\_23 Q: 1

What is the most accurate and precise method to measure the thickness of a coin?

- A** Use a micrometer screw gauge.
- B** Use a ruler and look at the scale perpendicularly.
- C** Use a top pan balance.
- D** Use the displacement method with water in a measuring cylinder.

\_\_\_\_\_ compiled by [examinent.com](http://examinent.com) \_\_\_\_\_

55. 0625\_s17\_qp\_23 Q: 2

A pendulum is swinging. Five students each measure the time it takes to swing through ten complete swings.

Three students measure the time as 17.2 s. Another student measures it as 16.9 s, and the fifth student measures it as 17.0 s.

What is the average period of the pendulum?

- A** 1.69 s      **B** 1.70 s      **C** 1.71 s      **D** 1.72 s

\_\_\_\_\_ compiled by [examinent.com](http://examinent.com) \_\_\_\_\_

56. 0625\_s17\_qp\_23 Q: 4

What are the units for mass, pressure and velocity?

	mass	pressure	velocity
<b>A</b>	kg	N s	Pa
<b>B</b>	kg	Pa	m/s
<b>C</b>	N s	Pa	m/s
<b>D</b>	Pa	N s	m/s

\_\_\_\_\_ compiled by [examinent.com](http://examinent.com) \_\_\_\_\_

57. 0625\_w17\_qp\_21 Q: 1

A student measures the volume of a cork.

He puts some water into a measuring cylinder and then one glass ball. He puts the cork and then a second, identical glass ball into the water as shown.

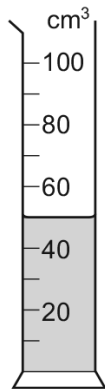


diagram 1

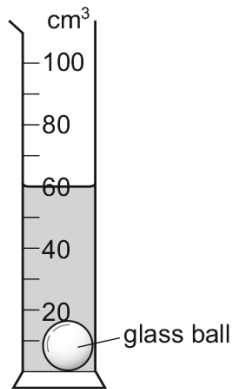


diagram 2

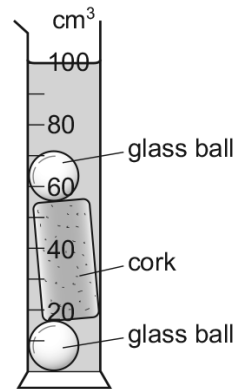


diagram 3

Diagram 1 shows the first water level.

Diagram 2 shows the water level after one glass ball is added.

Diagram 3 shows the water level after the cork and the second glass ball are added.

What is the volume of the cork?

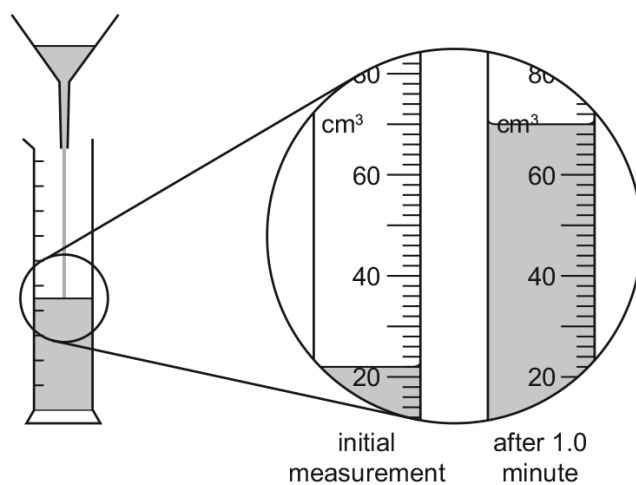
- A**  $30 \text{ cm}^3$       **B**  $40 \text{ cm}^3$       **C**  $50 \text{ cm}^3$       **D**  $100 \text{ cm}^3$

\_\_\_\_\_ compiled by [examinent.com](http://examinent.com) \_\_\_\_\_

58. 0625\_w17\_qp\_22 Q: 1

A student investigates the rate of flow of oil through a funnel.

The diagrams show the experiment and the volume of oil in the measuring cylinder at the start of the experiment, and one minute later.



What is the rate of flow of oil through the funnel during the one minute?

- A**  $0.73 \text{ cm}^3/\text{s}$     **B**  $0.80 \text{ cm}^3/\text{s}$     **C**  $44 \text{ cm}^3/\text{s}$     **D**  $48 \text{ cm}^3/\text{s}$

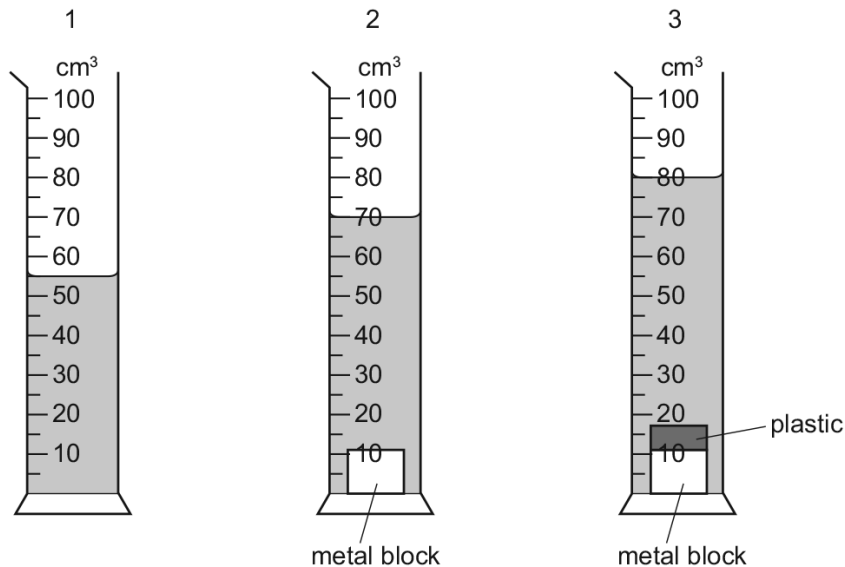
compiled by [examinent.com](http://examinent.com)

59. 0625\_w17\_qp\_23 Q: 1

A measuring cylinder contains some water. A small metal block is slowly lowered into the water and is then removed.

Finally a piece of plastic is attached to the metal block and the block is again slowly lowered into the water.

The diagrams show the measuring cylinder at each stage of this process.



What is the volume of the piece of plastic?

- A** 10 cm<sup>3</sup>      **B** 25 cm<sup>3</sup>      **C** 70 cm<sup>3</sup>      **D** 80 cm<sup>3</sup>

compiled by [examinent.com](http://examinent.com)

## 1.2 Motion

60. 0625\_m25\_qp\_22 Q: 2

Which row defines speed and velocity?

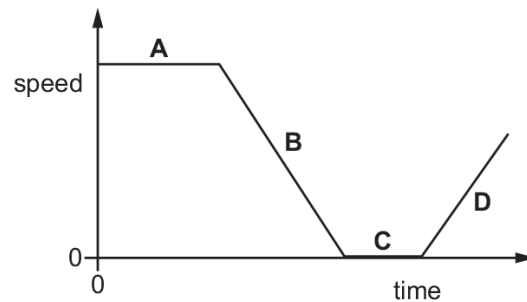
	speed	velocity
<b>A</b>	distance travelled in a given direction	speed per unit time
<b>B</b>	distance travelled per unit time	speed in a given direction
<b>C</b>	distance travelled in a given direction	speed in a given direction
<b>D</b>	distance travelled per unit time	speed per unit time

compiled by [examinent.com](http://examinent.com)

61. 0625\_m25\_qp\_22 Q: 3

The graph shows the journey of a motorcyclist.

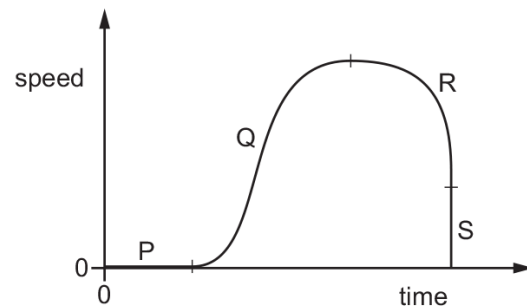
Which section of the graph shows the time when the motorcyclist is stationary at some traffic lights?



compiled by [examinent.com](http://examinent.com)

62. 0625\_s25\_qp\_21 Q: 1

The speed-time graph for a racing car is divided into four sections, P, Q, R and S. The car starts the race but soon crashes into a wall of tyres.



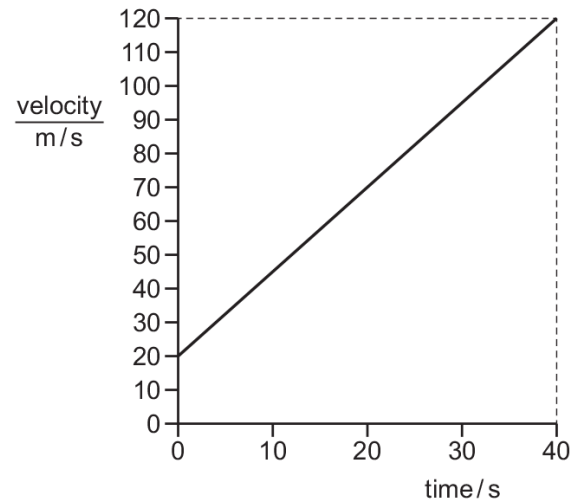
Which sections of the graph show that there is an acceleration that is changing?

- A P, Q, R and S
- B Q, R and S only
- C Q and R only
- D R and S only

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63. 0625\_s25\_qp\_22 Q: 3

The diagram shows a velocity–time graph for an object which is accelerating.



What is the acceleration of the object?

- A**  $0.40 \text{ m/s}^2$       **B**  $2.5 \text{ m/s}^2$       **C**  $3.0 \text{ m/s}^2$       **D**  $100 \text{ m/s}^2$

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64. 0625\_s25\_qp\_23 Q: 2

A car is driven from one town to another town along a road that is **not** straight.

The driver of the car divides the total distance travelled by the total time taken.

Which quantity does the driver calculate?

- A** the acceleration of the car  
**B** the average speed of the car  
**C** the kinetic energy of the car  
**D** the velocity of the car

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65. 0625\_s25\_qp\_23 Q: 3

Which quantity can be determined from the area under a speed–time graph?

- A** acceleration
- B** distance
- C** speed
- D** velocity

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66. 0625\_s25\_qp\_23 Q: 9

A stone is dropped from a bridge which is 22 m above a river.

What is the speed of the stone when it hits the water?

- A** 15 m/s
- B** 21 m/s
- C** 220 m/s
- D** 430 m/s

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67. 0625\_s24\_qp\_21 Q: 7

A stone is dropped from a tall tower and falls a distance of 50 m to the ground.

The stone has a mass of 3.0 kg.

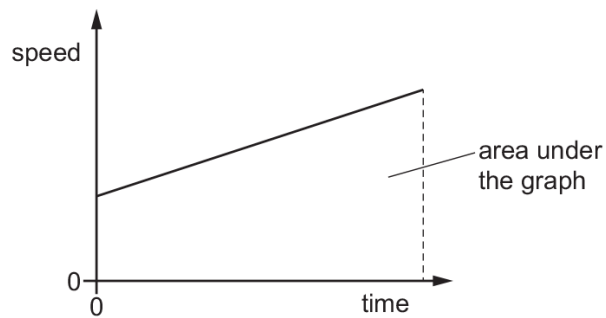
At which speed does the stone hit the ground?

- A** 17 m/s
- B** 31 m/s
- C** 54 m/s
- D** 150 m/s

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68. 0625\_s24\_qp\_22 Q: 2

The motion of an object is represented by the speed–time graph shown.



Which quantity is equal to the area under the graph?

- A acceleration
- B average speed
- C distance travelled
- D kinetic energy

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69. 0625\_s24\_qp\_23 Q: 3

An athlete runs 2.4 km in 12 minutes.

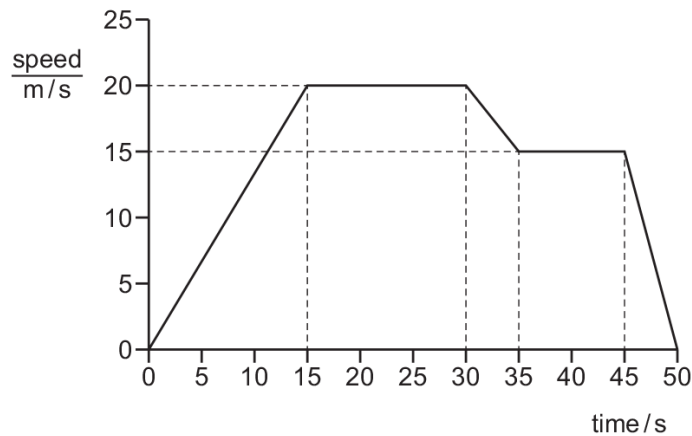
What is the average speed of the athlete?

- A 0.20 m/s      B 3.3 m/s      C 29 m/s      D 200 m/s

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70. 0625\_s24\_qp\_23 Q: 4

The graph shows how the speed of a car changes during a period of 50 s.



Which row gives the car's greatest acceleration and the car's greatest deceleration?

	<u>greatest acceleration</u> $\text{m/s}^2$	<u>greatest deceleration</u> $\text{m/s}^2$
<b>A</b>	0.75	1.0
<b>B</b>	0.75	3.0
<b>C</b>	1.3	1.0
<b>D</b>	1.3	3.0

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71. 0625\_w24\_qp\_21 Q: 2

A rocket travels with an average speed of 6 km/s for 2 minutes.

What is the distance travelled by the rocket?

- A** 12 km      **B** 50 km      **C** 720 km      **D** 12 000 km

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72. 0625\_w24\_qp\_22 Q: 2

A boy takes 30 minutes to cycle a distance of 8.0 km. He then walks a further distance of 2.0 km in 15 minutes.

What is his average speed?

- A** 4.5 km/h      **B** 5.6 km/h      **C** 12 km/h      **D** 13 km/h

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# Appendix A

## Answers

SN	Paper	Q. No.	Answer
1	0625_s25_qp_22	1	C
2	0625_s25_qp_23	1	A
3	0625_m24_qp_22	1	B
4	0625_m24_qp_22	4	A
5	0625_s24_qp_21	1	A
6	0625_s24_qp_22	1	C
7	0625_s24_qp_23	1	B
8	0625_s24_qp_23	2	A
9	0625_w24_qp_21	1	B
10	0625_w24_qp_22	40	C
11	0625_w24_qp_23	1	B
12	0625_w24_qp_23	3	A
13	0625_m23_qp_22	1	b
14	0625_s23_qp_21	1	d
15	0625_s23_qp_22	1	c
16	0625_w23_qp_21	1	D
17	0625_w23_qp_22	1	C
18	0625_w23_qp_22	2	C
19	0625_w23_qp_23	1	C
20	0625_w23_qp_23	2	B
21	0625_m22_qp_22	1	B
22	0625_m22_qp_22	14	B
23	0625_s22_qp_21	1	B
24	0625_s22_qp_22	1	D
25	0625_s22_qp_23	1	B
26	0625_w22_qp_21	1	D
27	0625_w22_qp_22	1	A
28	0625_w22_qp_23	1	C
29	0625_m21_qp_22	1	B
30	0625_s21_qp_21	1	C
31	0625_s21_qp_22	1	A
32	0625_s21_qp_23	1	C
33	0625_w21_qp_21	1	D
34	0625_w21_qp_22	1	C
35	0625_w21_qp_23	1	B
36	0625_m20_qp_22	1	A
37	0625_s20_qp_21	1	B
38	0625_s20_qp_22	1	A
39	0625_s20_qp_23	1	B
40	0625_w20_qp_21	1	C
41	0625_w20_qp_22	1	D
42	0625_w20_qp_23	1	B
43	0625_m19_qp_22	1	D
44	0625_s19_qp_21	1	C
45	0625_w19_qp_21	1	C
46	0625_w19_qp_22	1	D
47	0625_w19_qp_23	1	C
48	0625_m18_qp_22	1	D
49	0625_s18_qp_21	1	A

50	0625_w18_qp_21	1	B
51	0625_m17_qp_22	1	b
52	0625_s17_qp_21	1	A
53	0625_s17_qp_22	3	C
54	0625_s17_qp_23	1	A
55	0625_s17_qp_23	2	C
56	0625_s17_qp_23	4	B
57	0625_w17_qp_21	1	a
58	0625_w17_qp_22	1	B
59	0625_w17_qp_23	1	A
60	0625_m25_qp_22	2	B
61	0625_m25_qp_22	3	C
62	0625_s25_qp_21	1	C
63	0625_s25_qp_22	3	B
64	0625_s25_qp_23	2	B
65	0625_s25_qp_23	3	B
66	0625_s25_qp_23	9	B
67	0625_s24_qp_21	7	B
68	0625_s24_qp_22	2	C
69	0625_s24_qp_23	3	B
70	0625_s24_qp_23	4	D
71	0625_w24_qp_21	2	C
72	0625_w24_qp_22	2	D
73	0625_w24_qp_22	3	C
74	0625_w24_qp_23	2	C
75	0625_m23_qp_22	2	d
76	0625_m23_qp_22	3	b
77	0625_m23_qp_22	4	a
78	0625_s23_qp_21	2	b
79	0625_s23_qp_21	3	c
80	0625_s23_qp_22	2	c
81	0625_s23_qp_22	3	c
82	0625_s23_qp_23	1	b
83	0625_s23_qp_23	2	c
84	0625_s23_qp_23	3	c
85	0625_s23_qp_23	4	c
86	0625_w23_qp_21	2	D
87	0625_w23_qp_21	3	C
88	0625_w23_qp_22	3	C
89	0625_w23_qp_23	3	A
90	0625_w23_qp_23	12	D
91	0625_m22_qp_22	2	D
92	0625_m22_qp_22	3	D
93	0625_s22_qp_21	2	D
94	0625_s22_qp_21	3	A
95	0625_s22_qp_21	4	C
96	0625_s22_qp_22	3	D
97	0625_s22_qp_22	4	C
98	0625_s22_qp_23	2	D
99	0625_s22_qp_23	3	C

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