11+ Daily

11+ PRACTICE PAPER

Maths

25 questions, most with a chart, graph or diagram

25	25	5
questions	minutes	answer choices

Name _____ Date _____ Score _____ / 25

Instructions

1. You have **25 minutes** for 25 questions: about a minute each.
2. No calculator. Use the space on the question pages for working.
3. Each question has **one** correct answer. Mark it on the separate answer sheet.
4. The questions get harder as you go. If you get stuck, move on and come back.
5. No marks are taken away for a wrong answer, so answer every question.

For the adult

Print the paper and the answer sheet. Sit your child at a clear table with a pencil, some spare paper if they like it, and a clock they can see. No calculator, and no help once the timer starts.

Mark it with the answers at the back. Each answer shows the method and the skill it tests, so you can see which topics need work.

Inside this paper

How to do it
Tips for the child, and the kinds of question

25 questions
Number, measure, shape and data, with space for working

Answer sheet
A separate page to mark answers on

Answers
Every answer with the reason, for the adult

Every question is original to 11+ Daily and checked for accuracy. This is a practice paper, not a past paper. Free to print for home and classroom use. © Egghead Studios Ltd.

HOW TO DO THIS PAPER

Working it out against the clock

Most marks are lost to small slips and to time, not to topics a child has never met. These habits protect both.

1. Read the question to the end

The last line says what to find: the change, the total, the width. Underline it before you start.

2. Write the working down

Even short steps. It is faster to check, and most wrong options are the answer to a step done halfway.

3. Check the units

Centimetres or metres, pence or pounds, minutes or hours. Change everything into the same unit first.

4. Estimate first

A rough answer rules out options that are far too big or too small before you work anything out.

5. Keep moving

About a minute a question. If one is taking much longer, make your best choice, mark it, and come back at the end.

6. Check it fits

Put your answer back into the question. Does the change plus the cost make the amount paid? Does the width plus 3 make the length?

What this paper covers

Reading clocks, bar charts, pictograms, a pie chart, line graphs, a conversion graph, timetables, number lines and Venn diagrams; the mean; angles, coordinates, translations, perimeter, 3D shapes and volume; factors, fractions, negative numbers, ratio, percentages, function machines and patterns. The questions are in rough order of difficulty, so the last few are the hardest.

Reading a chart or diagram

Read the title, the labels on each axis and the key before the question. Check what one square or one symbol is worth: a pictogram symbol may stand for 4 or 6, and a scale may go up in 2s or 10s.

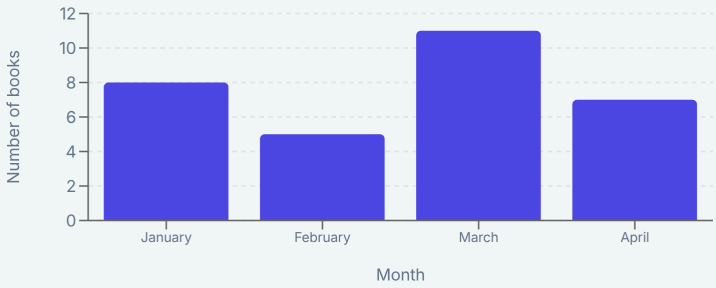
1 What time does the clock show?



A Twenty to three
B Twenty past four
C Twenty past three
D Twenty past two
E Quarter past three

WORKING

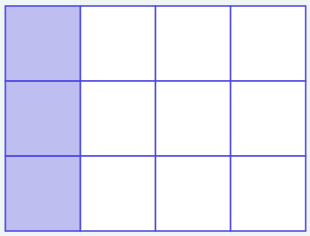
2 The bar chart shows the number of books read by children in a class each month. How many books were read in January?



A 10
B 12
C 8
D 6
E 4

WORKING

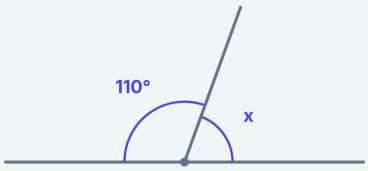
3 A grid has 3 rows and 4 columns. The shaded cells are shown. What fraction of the grid is shaded?



A 1/4
B 3/4
C 2/3
D 1/3
E 1/6

WORKING

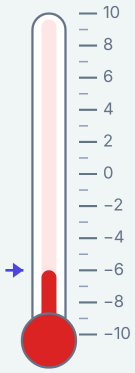
4 Two angles on a straight line are 110° and x°. What is the value of x?



A 80
B 60
C 110
D 250
E 70

WORKING

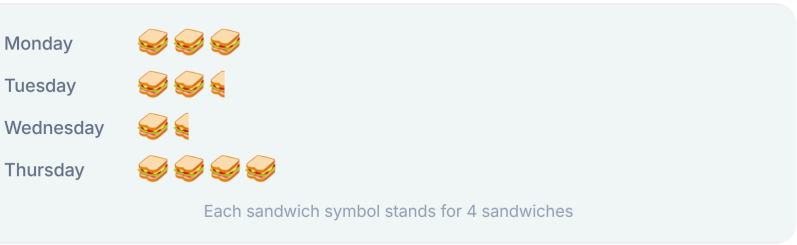
5 The thermometer shows the temperature at midnight. By 3 am it has dropped by 2°C. What is the temperature at 3 am?



A −8°C
B −4°C
C −3°C
D 8°C
E 4°C

WORKING

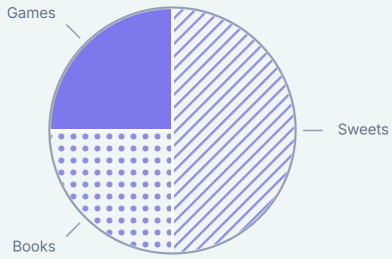
6 The pictogram shows the number of sandwiches sold in a café each day. Each symbol represents 4 sandwiches. How many sandwiches were sold on Tuesday?



A 14
B 10
C 8
D 6
E 12

WORKING

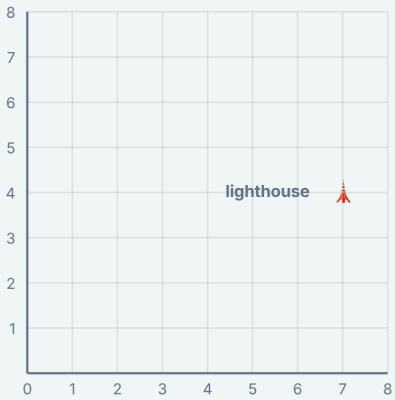
7 The pie chart shows how Priya spends her pocket money. She receives £20 each week. How much does she spend on books?



A £8
B £5
C £4
D £2
E £10

WORKING

8 What are the coordinates of the lighthouse on the map?



A (4, 7)
B (4, 6)
C (6, 4)
D (7, 5)
E (7, 4)

WORKING

9 The graph shows the height of a sunflower plant over 6 weeks. By how many centimetres did it grow between week 2 and week 4?



A 20 cm
B 10 cm
C 25 cm
D 15 cm
E 30 cm

WORKING

10 Priya sorts numbers into a Venn diagram with circles labelled 'Factors of 12' and 'Factors of 18'. Which number belongs in the intersection?



A 9
B 6
C 8
D 16
E 4

WORKING

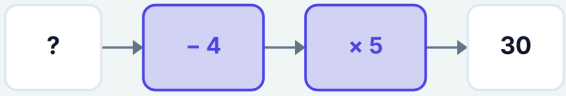
11 The number line below shows values from 3,000 to 4,000. Which letter is closest to 3,750?



A A
B B
C C
D D
E E

WORKING

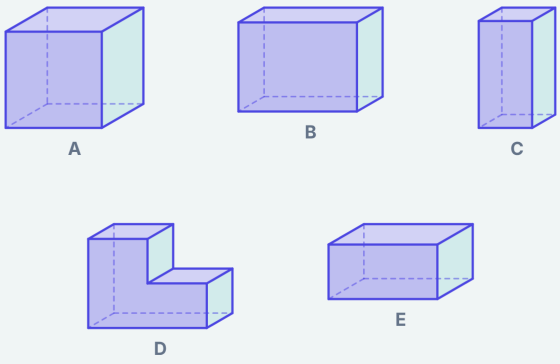
12 A machine subtracts 4 then multiplies by 5. The output is 30. What was the input?



A 34
B 10
C 24
D 26
E 2

WORKING

13 Look at the five shapes below. Which shape is NOT a cuboid?



A Shape A
B Shape B
C Shape C
D Shape D
E Shape E

WORKING

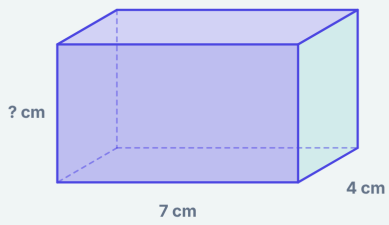
14 Use the timetable. Omar has to be at Marram Sands by 12:00. What is the latest train he can take from Quillon Road?

Station	1	2	3	4
Quillon Road	10:48	11:05	11:22	11:40
Beckford Lane	10:57	11:14	11:31	11:49
Marram Sands	11:19	11:37	11:54	12:12
Cresswold Central	11:36	11:53	12:11	12:29

A 11:40
B 11:05
C 10:48
D 11:22
E 11:54

WORKING

15 This cuboid has a volume of 84 cm^3. How tall is it?



A 3 cm
B 12 cm
C 21 cm
D 4 cm
E 3.5 cm

WORKING

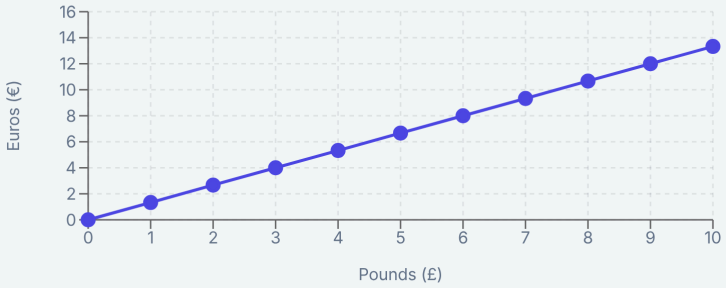
16 Leo wants to put a fence around his rectangular vegetable patch. The patch is 11 m long and 6 m wide. Fencing costs £6 per metre. How much will the fencing cost in total?



A £204
B £102
C £396
D £168
E £68

WORKING

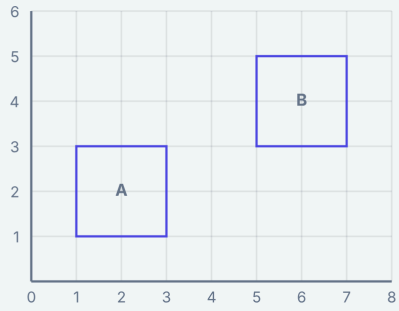
17 The currency conversion graph shows the exchange rate between pounds (£) and euros (€). How many euros would you get for £6?



A €7
B €10
C €8
D €6
E €9

WORKING

18 The grid shows shape A and shape B. Shape A has vertices at (1,1), (3,1), (3,3), (1,3). Shape B has vertices at (5,3), (7,3), (7,5), (5,5). Which single transformation maps shape A onto shape B?



A Reflection in the line y = 3

B Reflection in the line x = 4

C Translation 4 right and 2 up

D Rotation of 180° about (4, 4)

E Rotation of 90° clockwise about (1,1)

WORKING

19 Ivy is building a row of squares out of matchsticks. The first three terms are shown below. How many matchsticks will she need for Term 8?



A 22

B 28

C 25

D 32

E 19

WORKING

20 A school raised £360 for charity. They gave 2/5 to a local food bank and 1/4 of the remainder to an animal shelter. How much money went to the animal shelter?

A £144

B £36

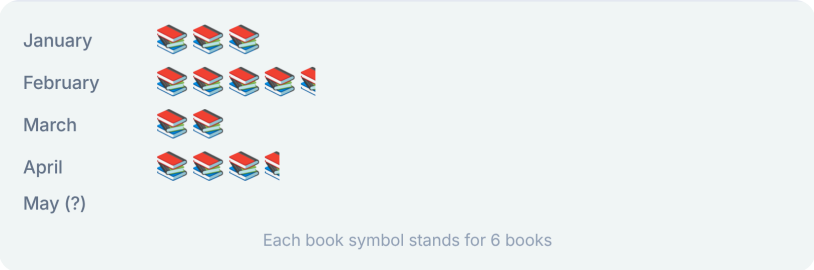
C £72

D £90

E £54

WORKING

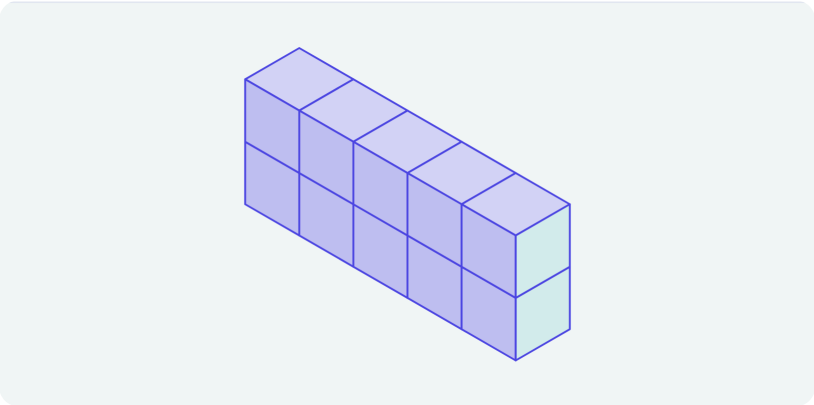
21 Each book symbol on Maya's reading pictogram stands for 6 books. The row for May is missing from the chart. Her mean across the five months was 21 books per month. How many books did Maya read in May?



A 21
B 24
C 30
D 33
E 27

WORKING

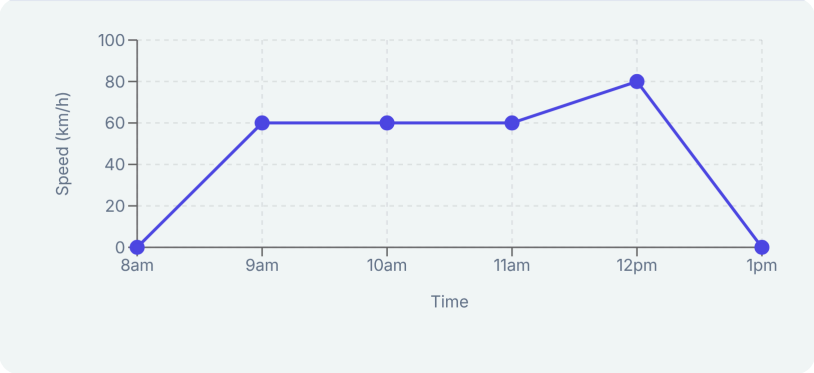
22 Nadia built this shape out of 1 cm cubes. She stood it on a sheet of paper and drew round the bottom of it. What is the perimeter of the outline she drew?



A 12 cm
B 16 cm
C 7 cm
D 20 cm
E 10 cm

WORKING

23 The graph shows the speed of a train during a journey. Between 9am and 11am it travels at a steady speed. How far does it travel between 9am and 11am?



A 120 km
B 80 km
C 100 km
D 160 km
E 140 km

WORKING

24 A jacket costs £80. Its price is reduced by 20% in a sale. After the sale, the price is increased by 10%. What is the final price?

A £80.00
B £64.00
C £72.00
D £70.40
E £56.00

WORKING

25 Vince and Wren share prize money in the ratio 4:7. Wren receives £84 more than Vince. How much prize money is there altogether?

A £28
B £84
C £308
D £132
E £252

WORKING

End of the paper. If you have time left, go back and check your answers.

11+ Daily

ANSWER SHEET

Maths

Name _____ Date _____

Mark one box for each question with a firm pencil line. If you change your mind, rub it out completely.

1	A	B	C	D	E		14	A	B	C	D	E
2	A	B	C	D	E		15	A	B	C	D	E
3	A	B	C	D	E		16	A	B	C	D	E
4	A	B	C	D	E		17	A	B	C	D	E
5	A	B	C	D	E		18	A	B	C	D	E
6	A	B	C	D	E		19	A	B	C	D	E
7	A	B	C	D	E		20	A	B	C	D	E
8	A	B	C	D	E		21	A	B	C	D	E
9	A	B	C	D	E		22	A	B	C	D	E
10	A	B	C	D	E		23	A	B	C	D	E
11	A	B	C	D	E		24	A	B	C	D	E
12	A	B	C	D	E		25	A	B	C	D	E
13	A	B	C	D	E							

Example: answer B A — C D E

Detach this sheet, or print an extra copy of this page to try the paper again.

FOR THE ADULT

Answers and explanations

One mark for each correct answer, out of 25. The skill beside each answer shows where a wrong answer came from: two or three wrong in the same area is the place to start. One short paper is a snapshot, so read nothing into a single score.

Q	ANSWER	WHY
1	C	**TIME & TIMETABLES** The hour hand is just past 3 (so the hour is 3). The minute hand is pointing at 4, which is 20 minutes. The clock shows twenty past three.
2	C	**BAR CHARTS & PICTOGRAMS** Reading the bar for January directly from the chart, the bar reaches 8 on the y-axis.
3	A	**FRACTIONS OF SHAPES** The grid has 3 × 4 = 12 cells in total. 3 cells are shaded. 3/12 simplifies to 1/4 by dividing both by 3.
4	E	**ANGLES** Angles on a straight line sum to 180°. So x = 180 − 110 = 70.
5	A	**NEGATIVE NUMBERS** The thermometer reads −6°C at midnight. Dropping (subtracting) 2°C: −6 − 2 = −8°C.
6	B	**BAR CHARTS & PICTOGRAMS** 2.5 × 4 = 10 sandwiches (2 whole symbols = 8, plus a half-symbol = 2, total 10).
7	B	**LINE GRAPHS & PIE CHARTS** The 'Books' segment is one quarter (25%) of the pie chart. 25% of £20 = £5.
8	E	**COORDINATES & POSITION** The lighthouse is 7 units along the x-axis and 4 units up the y-axis. Coordinates are (7, 4).
9	A	**LINE GRAPHS & PIE CHARTS** At week 2 the plant was 20 cm tall. At week 4 it was 40 cm tall. 40 − 20 = 20 cm growth.
10	B	**VENN DIAGRAMS** Factors of 12 are 1, 2, 3, 4, 6, 12. Factors of 18 are 1, 2, 3, 6, 9, 18. The numbers that are factors of both 12 and 18 are 1, 2, 3, and 6. From the options, only 6 is a factor of both.
11	D	**ESTIMATION & APPROXIMATION** 3,750 is three-quarters of the way from 3,000 to 4,000: the line covers 1,000, and 3,750 − 3,000 = 750. Letter D is at 3,750.
12	B	**FUNCTION MACHINES & INVERSE** Work backwards: 30 ÷ 5 = 6, then 6 + 4 = 10. The input was 10.
13	D	**3D SHAPES & NETS** Shapes A, B, C, and E are all cuboids with 6 rectangular faces. Shape D is an L-shaped prism. It has more than 6 faces and is not a cuboid.
14	D	**TABLES & TWO-WAY TABLES** Trains from Quillon Road reach Marram Sands at 11:19, 11:37, 11:54 and 12:12. The 11:54 arrival is the last one before 12:00, and that train leaves Quillon Road at 11:22.
15	A	**PERIMETER, AREA & VOLUME** The base measures 7 cm by 4 cm, so its area is 28 cm². Sharing the volume across that base gives 84 divided by 28, which is 3 cm.

Q	ANSWER	WHY
16	**A**	**PERIMETER, AREA & VOLUME** Perimeter = 2 × (11 + 6) = 34 m. Total cost = 34 × £6 = £204.
17	**C**	**LINE GRAPHS & PIE CHARTS** Find £6 on the bottom axis, go straight up to the line, then across to the euros axis: £6 is €8.
18	**C**	**TRANSFORMATIONS** Each vertex of shape A moves 4 right and 2 up: (1,1)→(5,3), (3,1)→(7,3), (3,3)→(7,5), (1,3)→(5,5). This is a translation of 4 right and 2 up.
19	**C**	**SEQUENCES & PATTERNS** Count the matchsticks: Term 1 uses 4, Term 2 uses 7, Term 3 uses 10. Each new square adds 3 more. Term 8 is 4 + 7 × 3 = 25.
20	**E**	**FRACTIONS OF AMOUNTS** 2/5 of £360 = £144 to food bank. Remainder = £360 − £144 = £216. 1/4 of £216 = £54 to animal shelter.
21	**E**	**BAR CHARTS & PICTOGRAMS** Mean × months = total: 21 × 5 = 105 books. Jan = 3 × 6 = 18; Feb = 4.5 × 6 = 27; Mar = 2 × 6 = 12; Apr = 3.5 × 6 = 21. Visible sum = 18 + 27 + 12 + 21 = 78. May = 105 − 78 = 27 books.
22	**A**	**3D SHAPES & NETS** Only the bottom layer touches the paper. It is a row of 5 cubes, 5 cm long and 1 cm wide, so the outline is a rectangle. The cubes stacked on top sit above that outline and do not change it. Perimeter = 5 + 1 + 5 + 1 = 12 cm.
23	**A**	**LINE GRAPHS & PIE CHARTS** Between 9am and 11am the speed is 60 km/h. Time = 2 hours. Distance = 60 × 2 = 120 km.
24	**D**	**PERCENTAGES** 20% of £80 is £16, so the sale price is £80 − £16 = £64. 10% of £64 is £6.40, so the final price is £64 + £6.40 = £70.40.
25	**C**	**RATIO & SCALING** The difference in parts is 7 − 4 = 3, which equals £84, so 1 part = £84 ÷ 3 = £28. The total number of parts is 4 + 7 = 11, so the total is 11 × £28 = £308.

WHAT NEXT

Turn the gaps into a plan

A paper shows where your child is today. 11+ Daily does the part in between: open the app and it picks a short session on the skills your child is weakest in, brings back what they got wrong until it sticks, and shows you progress by subject and skill. A session takes about ten minutes, with more whenever your child wants it. Free for 14 days, no card needed.

11plusdaily.co.uk

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