11 Plus Programme - Boost GL Maths and NVR – Course Preview

This preview is designed to show you, in some depth, the work we'll go through in this course. It covers the maths and non-verbal reasoning elements of GL 11 Plus Exams as thoroughly as possible within the time available.

Who should be doing it?

- The course is designed to boost the skills of pupils going for a GL 11 Plus Exam.
- It should be central to the work of any child preparing at home.
- It is also very useful for any child using a tutor or going to a tuition centre.
- The course covers Maths and Non-Verbal Reasoning plus it focuses on the core skills that lead to success.

N.B. This is our shortest full course. It is very intensive and ideal for those with not long to go (6-15 weeks preparation) before the exam.

Why is the course so successful?

- **40% of the marks** on 11 Plus Tests are weighted towards numerical and non-verbal reasoning skills.
- With these skills making up such a large percentage of the tests, our structured course ensures you spend the correct amount of time on each area whilst achieving full coverage of all the materials.
- The course is fully planned which makes life much easier for parents than using books alone. This is especially true when time is tight.
- The course gradually introduces children to timed tests in the right way so that they build their skills and confidence as they go.
- While the course is regularly updated the core of it has been used for many years with proven success.

Who is this course right for?

This course is ideal for any pupil with around 6-15 weeks to go until the GL 11 Plus exam. The course is aimed at those commencing structured preparation rather than looking for revision or extension materials. The course is delivered in 10 parts and ideally a week would be spent on each. It could be completed in 6 weeks by working more intensively or in a more relaxed way in 15 weeks.

- **No book covers the ground so completely.**
- **This course is fully structured, revision is built in.**
- **There's much less planning work for parents to do**

SCROLL DOWN TO SEE COURSE EXAMPLES

Make sure you go over any mistakes that you have made!

11 Plus Programme - Boost - GL Maths and NVR - Part 2

Remember that maths skill takes time to build up. Doing a little of this work each day and making sure that times tables are practised and key concepts are revised will rapidly increase ability.

Maths

1. **Working Accurately**

   - **Accuracy t**e questions in five minutes because weaknesses som are put under time pressure.

   - **Spot the m**t. See if you can get them all!

2. **Timed Test.** A are allowing 27 minutes. To improve please spend lot es.

3. **Revision of dec** to improve and revise decimals.

4. **Area Problems.** his topic.

5. **4 Rules Revisio** on four operations as they relate to money. You'll ha h.

6. **BODMAS.** For on, for others it is essential to learn. It helps you unc ns.

7. **BODMAS Practice questions.** The first ten questions are standard BODMAS questions. The second ten will stretch your reasoning skills.

Front Sheets

These sheets come at the front of every part of the course. They let you know what is included in each part of the course.

We let you know when to approach each activity and why it is important.

Non-Verbal Reasoning

8. **NVR Type 4 - Codes.**

9. **NVR Type 5 – Missing Sequence.**

10. **NVR Type 6 - Missing Square.** Please spen the question type and example before doing the five ake, it's really important that you work out why, otherwise you will not improve.

The whole course is planned for you with revision built in.

- Please sign below when you have completed everything.
- Your helper may have to test you on some things.

Signed: (Parent/Teacher and Pupil).....

Please do lots of reading throughout this programme.

We hope you enjoyed this part of the course.

Speed and Accuracy Test

- You have five minutes. Children should be working towards scoring 100%.
- Watch out for the changes to + /÷ / - / x
- This test will be repeated five times, where mistakes are made it will be an indication that further times tables work and attention to detail is necessary.

8 + 7 =	9 – 4 =	6 x 7 =	54 ÷ 6 =	8 + 4 =
7 x 5 =				=
12 – 7 =				=
96 ÷ 8 =				9 =
6 x 3 =				=
5 + 8 =				3 =
5 x 6 =				=
5 + 7 =	15 – 6 =	48 ÷ 6 =	5 + 4 =	64 ÷ 8 =
16 – 8 =	36 ÷ 9 =	8 + 8 =	42 ÷ 7 =	7 x 7 =
7 x 6 =	9 – 6 =	72 ÷ 9 =	9 + 8 =	108 ÷ 9 =
17 – 9 =	9 + 6 =	6 x 8 =	19 – 7 =	12 + 5 =
8 x 3 =				1 – 7 =
11 – 6 =				3 + 6 =
8 x 6 =				x 9 =
5 x 7 =				3 – 7 =
7 – 2 =				2 ÷ 4 =
3 + 7 =	16 – 7 =	7 + 8 =	4 x 6 =	14 – 6 =
12 – 9 =	9 x 3 =	11 – 8 =	49 ÷ 7 =	5 + 8 =
8 x 9 =	6 + 7 =	27 ÷ 9 =	15 – 4 =	9 x 7 =
72 ÷ 8 =	13 – 9 =	5 x 12 =	4 + 8 =	18 - 7 =

Speed and Accuracy Tests

At the beginning of the course we spend time exposing whether pupils have sufficiently solid core skills. As these skills provide the fundamental basis from which children will develop, ensuring these are well established will aid them during the other sections of the course.

Speed and Accuracy Tests

This test uses what many consider easy maths but is very difficult due to the time pressure. It exposes whether children have sufficiently solid core skills and provides an important source of revision for those that do.

Score /100

Spot the Mistakes - Maths

- **Victor has completed his Mental Maths task but unfortunately he's made a number of mistakes. His answers are underlined.**
- **Circle the mistakes. See if you can work out what he might have done wrong**

① 300 + = *1050mm*

② 2 ½ Kg

③ £1.00 - 58p = *42p*

④ Find the sum of £1.15 and £2.85 =

⑤ Find th costing 90m = *290m*

⑥ What is the product of 9 + 99 = *108*

⑨ 116mm = *11cm 6mm*

⑩ ½ of £4.16 = *£1.04*

⑫ What is the product of 8 and 50 = *58*

Spot the mistakes

We also use other accuracy tests like this Spot the Mistakes test. Children that cannot work accurately will not do well in an 11 plus exam because of the time pressure.

Find the mistakes

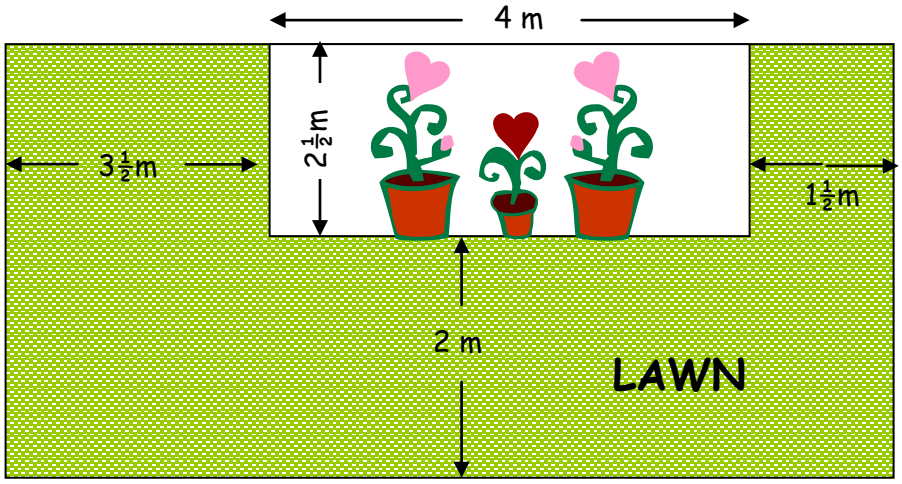
Helping children to switch on their self-checking skills helps them work more accurately in the exam.

Marks /

Area Problems

A rectangular garden comprises a rectangular flowerbed surrounded on three of its sides by a lawn.

Answer the following questions which relate to this diagram.



a)

b)

c) garden.

Answer:_____

Area Problems

We also make sure we cover the core topics children may get questions on. This sheet is one we use to help children learn about area.

d) Work out, in square metres, the area of the flowerbed.

Answer: _____

e) What is the area of the lawn?

Answer: _____

f) Find the cost of re-sowing the lawn if grass seed costs £1.86 for each square metre of lawn.

Answer: _____

The BODMAS Rule

The rule for sums containing brackets is: **BODMAS**

This means:
Bracket **O**ver **D**ivision **M**ultiplication **A**ddition and **S**ubtraction.
In other words you must work out the sum in the **B**racket first, and then complete the question by doing:

Division (if required), then
Multiplication (if required), then
Addition (if required), then
Sub

Remembe ans
you must ure,
so: 5(3

Here is an

6(1

= 6 x 2 – 3 Then **M**ultiply
= 12 – 3 Then **S**ubtract
= 9 ✓

Now look at this question:

6(2 62 = 7.98
6 x

Please file this away safely because you will need to refer to it again when you start your Revision papers.

PS: I bet no one in your class will know this.

BODMAS
This is another example of the focus we place on individual topic knowledge. For some children topics will be entirely new, for others it will act as useful re-enforcement.

BODMAS
As part of each topic introduction/review we include further work and examples to ensure knowledge has sunk in properly.

TIMED TEST NUMBER 1

You have 30 minutes to complete this test.

Write the missing number in the box:

1.

8 | 6

Timed Tests

We start doing easier timed tests early on to get children used to working under the time constraints similar to that of an exam.

3.

1 0 □

7 | 7 6 3

1 5 3

5 | 7 □ 5

This calculation has the same number missing from each box.
What is it?

5.

Timed Tests

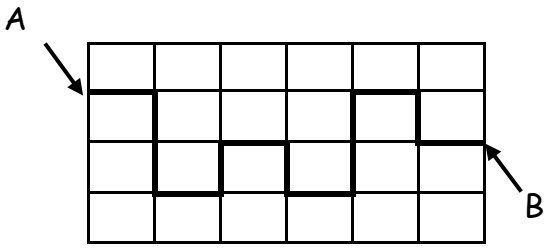
While easier than full 11 Plus tests, these tests include questions which could end up in the test itself. This is beneficial as it gets students familiar with the types of question they might encounter.

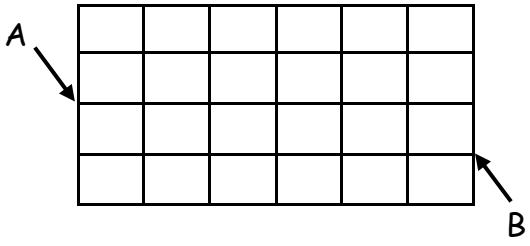
of this

alves.

this grid into two halves:

Start at A and go along the lines, finishing at B.





Mathematics Revision Test 2

1. 323.76 + 19 hundredths
   = _____

2. Draw a hexagon in this space:

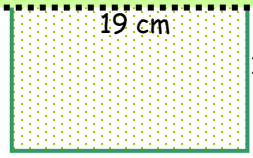
3. 13^2 = _____

4. Draw an obtuse angle – label it.

5. Draw a rhombus

6.

7.

8. 

   Find the area of this shape:
   = _____

9. 4.9 L = _____ mls

10. Write 555 tenths as a decimal = _____

11. 9 squared = _____

12. 12 x 8 = _____

13. 6 x 7 = _____

14. 9 x 6 = _____

15. How many tenths in 23.9?

Maths Revision Tests

Throughout the course we ensure children are using the skills they have regularly. This is an example of our regular revision test sheets. These sheets cover a great deal of the syllabus and little by little help to re-enforce knowledge and give children confidence.

NO/YES

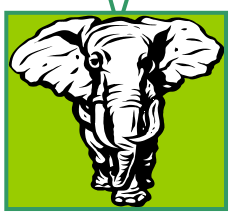
20. How many lines of symmetry has a hexagon?
    = _____

SCORE BOX:

Maths Revision Tests

With Maths it's essential that children use their skills regularly so we provide enough of these and other pages to ensure children are working at the level of frequency.

to do long multiplication!



Are you improving? YES/ANY MINUTE NOW

5. Complete the following money problems.

a. A single bus fare to work costs £1.25. How much have I spent altogether on bus fares by the time I have returned home? _____

b. If I go to the newsagent and buy 5 magazines costing £3.99 each. How much di___

c. I___ I bought in questio___

---

6. Ansu

a. Six squared = _____

b. The cube root of 27 = _____

c. 60% of £60.00 = _____

d. 2(p – q) when p = 4.7 and q = 2.3 = _____

e. The square root of 6 = _____

f. Two fifths of 75kg = _____

g. 4(x + y) when x = 6.1 and y = 3.8 = _____

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7. If

a.

b.

c.

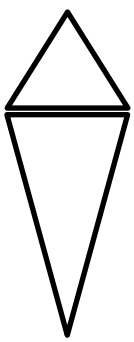
---

8. How many lines of symmetry do these shapes have? Some may have none.

a.

b.

c.



d.

Maths Papers

Early in the course we start to give a full timed paper in each part. We ask parents to ensure this is administered correctly.

Maths Papers

Children get every opportunity to learn to complete the papers within the time allowance and the work we have done on core skills and topics means they should be focussed on accuracy.

17. When peter went to Spain recently the exchange rate was 1.2 Euros to the pound sterling. He bought a bottle of wine costing 6.7 Euros. What was the cost of the bottle in pounds sterling? (round you answer to the nearest penny).

_____

Maths Paper

We continue to work on technique throughout the course but equally we ensure children have masses of exam practice as they are asked to do a full maths paper or tests every week.

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18. A far 0 litres of water. The water every 3 se

---

19. Which of these numbers is closest to three? _____

A. 3.075 **B**. 3.08 **C**. 3.1 **D**. 3.089 **E**. 3.101

---

20. ever, it start ed and took

21. ____

Maths Paper

The papers are at least as difficult as those they will find in the exam so they will be very well prepared. We also ensure they see a variety of different types of question to ensure they are prepared for every eventuality.

6.4 6.5 6.6 6.7 6.8

---

22. A jar of marbles was made up like this:

	Large	Small
Black	8	14
Red	12	16

What percentage of the marbles were small? _____

Non-Verbal Reasoning

1. LIKE SHAPES / TYPE 1

In these questions you will be given an example where one shape becomes another shape. You will then be given a question shape and be asked to choose which one of five shapes it should become. You should use the example to help you choose. You should look at the examp[illegible]pe and then apply the sa[illegible]

What[illegible]

As wit[illegible]nd **close** **observ[illegible]**

- [illegible]
- [illegible]s?
- [illegible]
- [illegible]f they have [illegible]
- What size are the shapes or items within the overall shape in relation to each other?
- What thickness or length are any lines whether these are floating or used to make up shapes? Boldness is often a feature within questions.
- Do shapes that are behind another shape change to become in front?

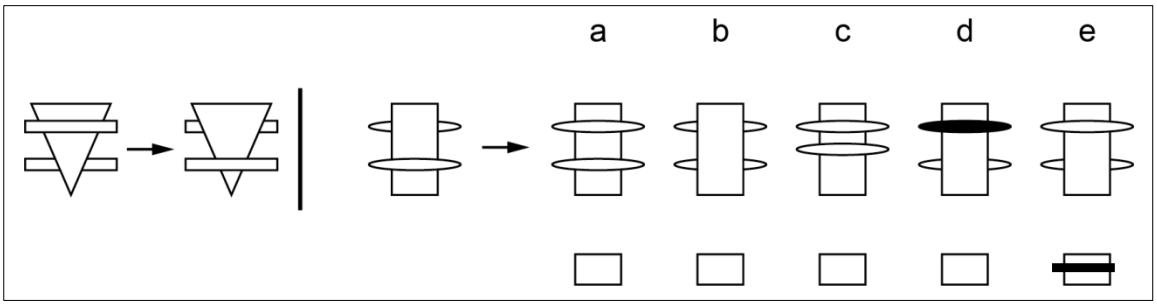
Technique tips

- Focus exactly on how the first shape has changed to become the second shape, more than one thing may have changed.
- Make a list of the changes if necessary
- Once you have done this look at the answer options and see which has changed in the same way.
- Often you will be left with two options which are close, there will always be a small distinguishing item which makes one of these a closer match than the other (EG direction of diagonal lines within a shape). You will need to renew your focus to find it.
- Unless you are doing a timed test do one question at a time. Give your answer then check if it is correct and review the explanation. This takes time but looking at the answer and explanation while the question is still fresh is the only way to learn.

Like Shapes - Explanation

We identify 9 different types of non-verbal reasoning question. With each we introduce it with a very detailed explanation and an example. We explain what the questions entails and what children need to look out for to solve it.

Example



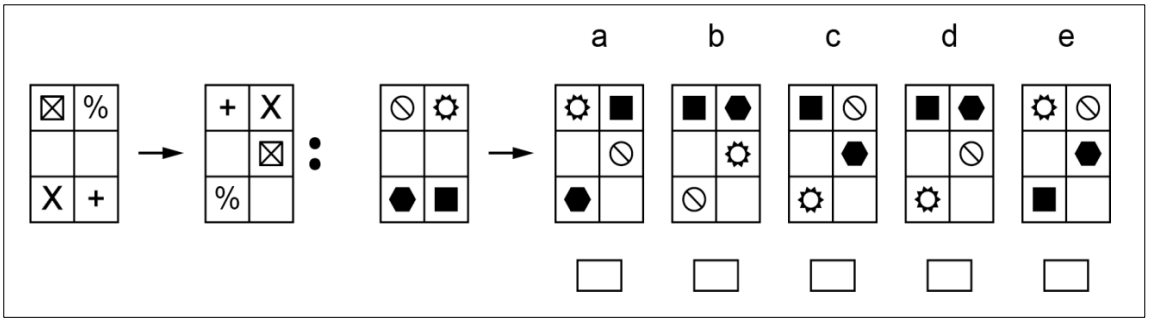
Explanation

There is no change in the large shape from the first set of shapes to the second. However the shape that is behind the larger moves to the front and the other shape that is in front moves behind.

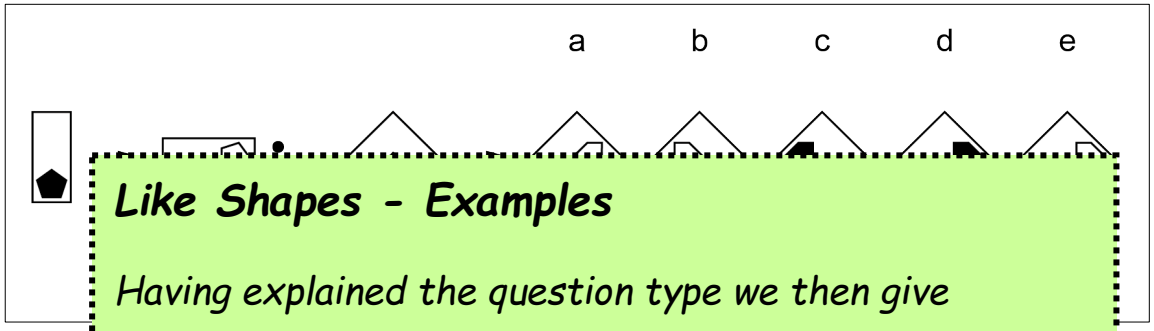
Non-Verbal Reasoning

1. LIKE SHAPES / TYPE 1

1



2

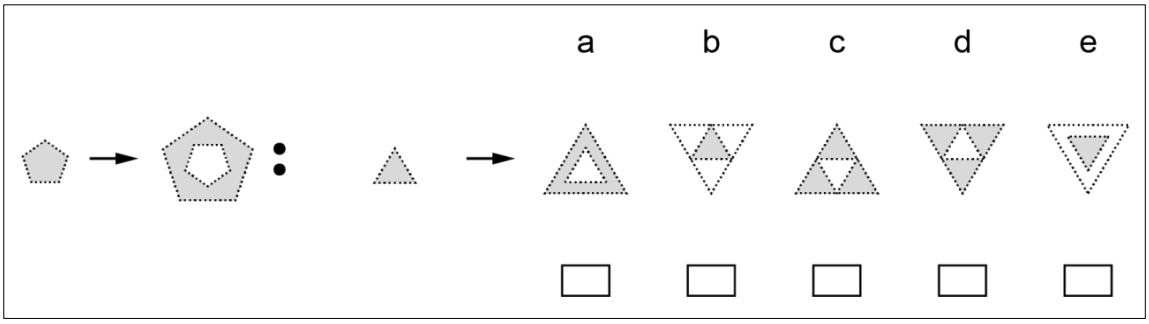


Like Shapes - Examples

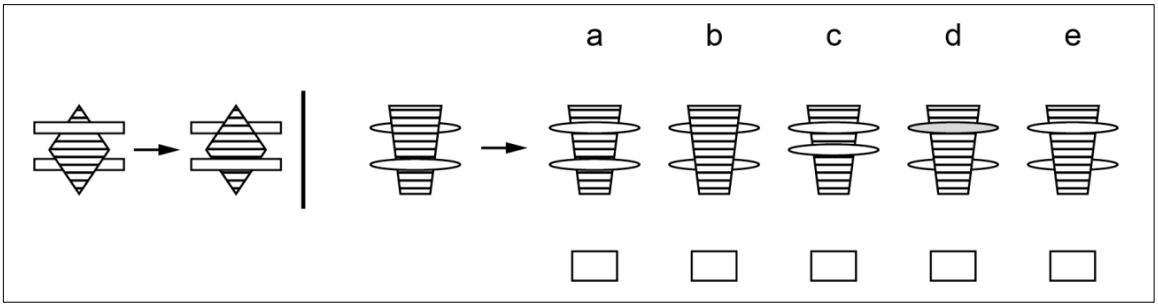
Having explained the question type we then give children a few questions to try out to secure their learning. Each question has a very detailed solution and as children progress they learn through reading each detailed answer and reviewing their answer vs the options.

3

4



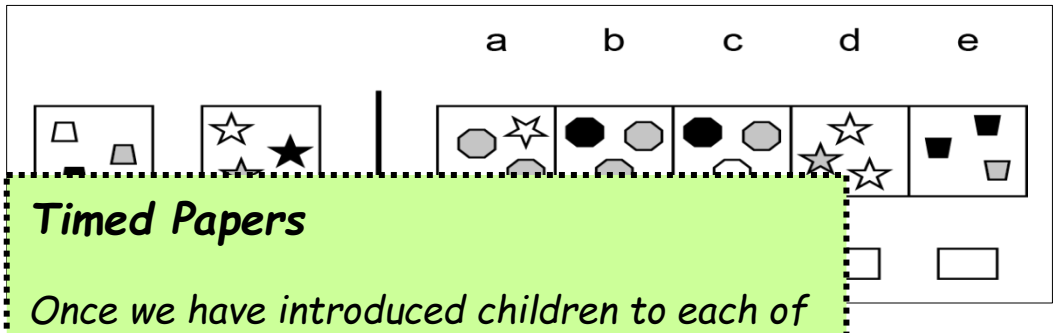
5



Non-Verbal Reasoning Revision

7. MOST LIKE / TYPE 7

Example



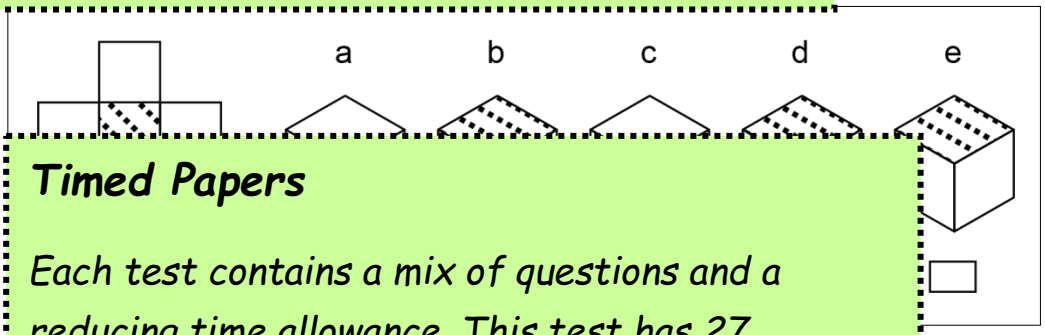
Timed Papers

Once we have introduced children to each of the nine different Non-Verbal Reasoning questions types we have identified we then start giving them timed revision tests.

d the order of
lack, one white
be C.

Explanation

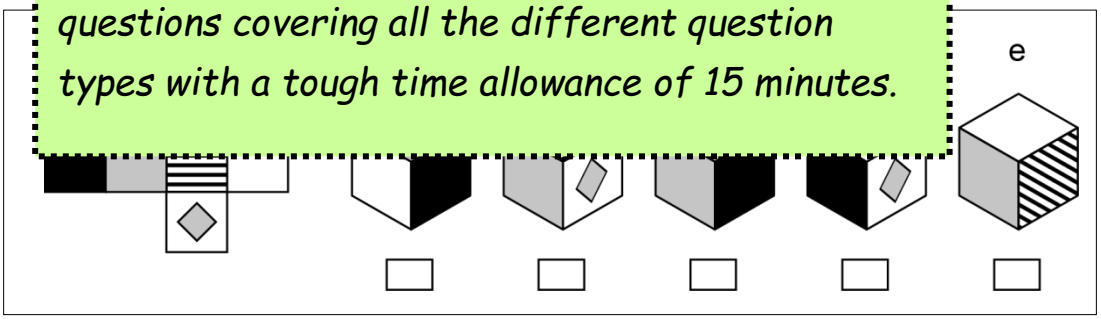
1



Timed Papers

Each test contains a mix of questions and a reducing time allowance. This test has 27 questions covering all the different question types with a tough time allowance of 15 minutes.

2



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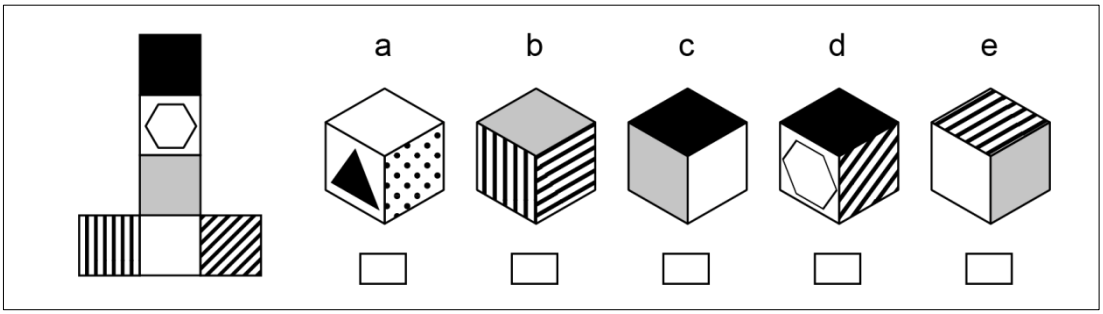

Maths

Speed and Accuracy Test

15	5	42	9	12
35	6	40	15	2
5	14	63		
12	11	12		
18	8	84		
13	5	0		
30	11	16		
12	9	8		
8	4	16		
42	3	8		
8	15	48		
24	56	9		
5	4	3		
48	9	12		
35	11	5		
5	7	96		
10	9	15		
3	27	3		
72	13	3		
9	4	60		

Spot the Mistakes

① 8 (6x7 is 42 not 49)

③ 6m (there are 100cm in 1m not 10cm)

④ 103m (500m – 397 is 103m, not 113m. Calculation error)

⑧ 3L (there are 1000ml in 1 litre not 100ml)

⑪ 775 minutes (Misread of question, it is from 9.25 am to 10.20pm)

Adding and Subtracting of Decimals

1) 29.44
2) 84.5
3) 424.485
4) 125

Full answers for every question

There are answers provided for every question in each part of the course.

Where a full detailed explanation is needed we give it.

a) 9m

b) $4\frac{1}{2}$ m

c) 40.5m²

d) 10m²

e) 30.5m²

f) £56.73

BODMAS practice

1) 60
2) 62
3) 62
4) 169
5) 78
6) 2
7) 8
8) 8
9) 6
10) 3
11) (4+8) x (3-2)
12) (6+4) x8
13) 72- (8x7)+9

(5 x 8)

)

+ (7 x 7)

4)

)

x 4

(7 x 7)

- 2

9) 1
10) £28.60
11) 98
12) 80%
13) 70%
14) 50%
15) 25%
16) $66\frac{2}{3}$ %
17) 20%
18) 86.24
19) 31
20) 56.35
21) 19.77
22) 9
23) 44
24) 11
25) £1.03