



Year 6 • Term 3

SATs-style reasoning paper



Name: _____



Assalamu alaikum! I'm Adam.

This is your Year 6, Term 3 **reasoning paper**. It is set out like the real Key Stage 2 SATs paper, so you can practise under test conditions.

- Say **Bismillah** and find a quiet place to work.
- You have **40 minutes**. There are **29 questions** worth **32 marks**.
- Write your answers in the boxes. If a question says 'show your method', you may get a mark for your working.
- If you get stuck, move on and come back later.

My score

/ 32

Score	Adam says...
27+ marks	Mashallah, outstanding!
22+ marks	Alhamdulillah, great work!
16+ marks	Good effort, keep going!
0+ marks	Keep practising, insha'Allah!

For grown-ups: The reasoning paper mirrors SATs Papers 2 and 3: problem solving and reasoning in 40 minutes. Questions are neutral and SATs-style. The mark scheme is on page 9. Print on A4 at 100% scale.



Believe in Allah and His Messenger and spend out of that in which He has made you successors.

Qur'an 57:7

- 1 Write these in order, starting with the smallest.

62%

$\frac{7}{10}$

$\frac{3}{5}$

0.65

1 mark

- 2 Here are the scores of 5 players: 37, 36, 48, 45, 49.
What is the mean score?

1 mark

- 3 A cuboid is 9 cm long, 6 cm wide and 5 cm high.
What is its volume?

 cm³

1 mark

- 4 Sam buys a book for £3.09 and a game for £6.36.
How much change from £20?

 £

1 mark

- 5 Write a number between 1 and 50 that is a multiple of 4 and a multiple of 10.

1 mark

- 6 A rectangle has an area of 192 cm². Its width is 8 cm.
What is its perimeter?

 cm

1 mark



Those who spend in the way of Allah are like a seed which grows seven spikes; in each spike is a hundred grains.

Qur'an 2:261

- 7** Here is part of a bus timetable.

Stop	Time
Park Road	08:35
High Street	08:47
Station	08:59
Library	09:22

How many minutes does the bus take from Park Road to the Library?

1 mark

- 8** Priya and a friend share 72 stickers in the ratio 4 : 5.
How many stickers does each person get?

and

2 marks

- 9** There are 90 children in a school choir. $\frac{2}{6}$ of them are girls.
How many boys are in the choir?

1 mark

- 10** A jacket costs £240. In a sale the price is reduced by 25%.
What is the sale price?

£

1 mark

- 11** Here is a sequence: **6, 11, 16, 21, ...**
What is the 20th term?

1 mark



"Shall I not tell you of something which, if you do it, you will love one another? Spread salam among yourselves."

Hadith, Muslim

- 12** Write this number in digits.
two million five hundred and fifty-six thousand three hundred and twenty-five

1 mark

- 13** A school orders 22 boxes of pencils. Each box has 48 pencils. 193 pencils are given out.
How many pencils are left? *Show your method.*

2 marks

- 14** Sam buys a book for £3.64 and a game for £6.77.
How much change from £20?

£

1 mark

- 15** There are 48 children in a school choir. $\frac{6}{8}$ of them are girls.
How many boys are in the choir?

1 mark

- 16** A jacket costs £240. In a sale the price is reduced by 15%.
What is the sale price?

£

1 mark



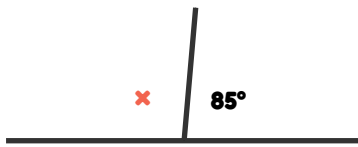
Indeed, I will make upon the earth a successive authority (khalifah).

Qur'an 2:30

- 17 At midnight the temperature was -3°C . By midday it was 6°C .
How many degrees did the temperature rise?

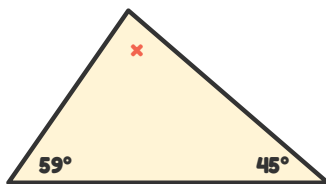
 $^{\circ}\text{C}$
1 mark

- 18 Calculate the size of angle x . *Not drawn accurately.*

 $x =$ $^{\circ}$

1 mark

- 19 Calculate the size of angle x . *Not drawn accurately.*

 $x =$ $^{\circ}$

1 mark

- 20 A cuboid is 6 cm long, 6 cm wide and 5 cm high.
What is its volume?

 cm^3
1 mark

- 21 Write a number between 1 and 50 that is a multiple of 4 and a multiple of 10.

1 mark

*My Lord, increase me in knowledge.***Qur'an 20:114**

- 22** A school orders 34 boxes of pencils. Each box has 48 pencils. 228 pencils are given out.

How many pencils are left? *Show your method.*

2 marks

- 23** Noah buys a book for £3.34 and a game for £3.50.
How much change from £20?

£

1 mark

- 24** There are 128 children in a school choir. $\frac{6}{8}$ of them are girls.
How many boys are in the choir?

1 mark

- 25** A jacket costs £120. In a sale the price is reduced by 30%.
What is the sale price?

£

1 mark

- 26** At midnight the temperature was -4°C . By midday it was 12°C .
How many degrees did the temperature rise?

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

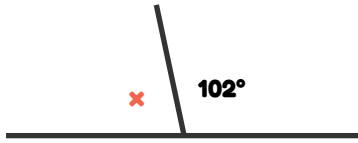
1 mark



O you who believe, seek help through patience and prayer. Indeed, Allah is with the patient.

Qur'an 2:153

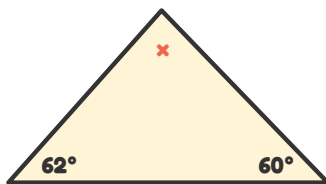
- 27** Calculate the size of angle x . *Not drawn accurately.*



$x =$ $^{\circ}$

1 mark

- 28** Calculate the size of angle x . *Not drawn accurately.*



$x =$ $^{\circ}$

1 mark

- 29** A cuboid is 12 cm long, 6 cm wide and 4 cm high.
What is its volume?

cm^3

1 mark



For grown-ups

Mark scheme

Total: 32 marks

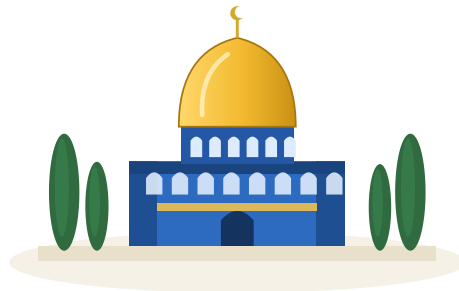
Q	Answer	Marks
1	3/5, 62%, 0.65, 7/10	1
2	43	1
3	270 cm ³	1
4	10.55	1
5	20, 40	1
6	64 cm	1
7	47	1
8	32 and 40	2
9	60	1
10	180	1
11	101	1
12	2,556,325	1
13	863	2
14	9.59	1
15	12	1

Q	Answer	Marks
16	204	1
17	9	1
18	95°	1
19	76°	1
20	180 cm ³	1
21	20, 40	1
22	1,404	2
23	13.16	1
24	32	1
25	84	1
26	16	1
27	78°	1
28	58°	1
29	288 cm ³	1

For 2-mark questions, award 1 mark for a correct method or for one part correct. Accept equivalent answers (e.g. equivalent fractions or decimals).



Mashallah!
Maths Superstar



This is to say that

has completed **Adam's Maths – Year 6, Term 3
Reasoning paper.**

Alhamdulillah for all your hard work! May Allah bless your learning.

Signed

Date